



NAZARETH COLLEGE OF ARTS & SCIENCE

(Affiliated to the University of Madras)

(Re-accredited with 'B' grade by NAAC)

Kovilpadthagai Main Road, Kannadapalayam, Avadi



DEPARTMENT OF COMPUTER SCIENCE

2022-2023 / Vol 04

DEPARTMENT VISION:

To build intensively serving leaders with rich moral values, social concern and profound knowledge in Computer Science that swiftly challenges in 21 st Century.

DEPARTMENT MISSION:

- To provide hands on experience in the field of advanced Computer Science.
- To enhance proficiency in problem solving techniques.
- To develop professional leaders with ethical values.

About The Department

The department was established in the year 2000 by C & D Educational trust. It was started with initial strength of 24 students. This Course prepares the students to work in teams to build software system and apply the technologies in various fields of Computer Science, including mobile application, website development and management, database and computer networks.

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Mr. V. RAHUL 1st B. Sc(C.S.)



SECRETARY'S MESSAGE



"Education is the passport to future, for tomorrow belongs to those who prepare for it today"

-Malcolm X.

I am delighted to know that the Department Of Computer Science is set to release in fourth issue of News Letter. The Insurance of this news letter is the assurance of our ideal education service that likely to be extended in future.

I offer my appreciation to the members of the faculty and students involved in bringing out the edition victoriously.

PRINCIPAL'S MESSAGE

Dear students and faculty it is a great happiness, I share my thought and wishes for the news letter of the Department of Computer Science. The release of the "Array Express" another milestone in the department towards innovation and knowledge sharing.

The Age of the big data

Data science has taken over the corporate world in the last few years. In today's digital world, lot of information is stored in big data. Those data provide the opportunities to solve the big problem of the society. Information is the oil of the 21st century and analytics in the combusine engine said by Peter Sondergaard, senior vice president, Gartner. So if one is good in numbers and fascinated by data be ready for opportunities that knock that door embrace the new age of big data. I congratulate the department for this initiative and believe that teaching learning combine with practical experience will equip the students to handle challenges in all walks of life and help them to embrace the age of big data.



VICE PRINCIPAL'S



Dear Reader's

Greetings to you and warm wishes!

"The mind is not a vessel to be filled, but a fire to be kindled." Said Plutarch. I congratulate the staff and students of all faculties who used various mediums of expression to present their ideas. As long as our ideas are expressed and thoughts kindled we can be sure of learning, as everything begins with an idea.

Array Express, our Department magazine, is a platform for our students to showcase their creative abilities hidden dreams and aspirations for writing. Our magazine aims towards bringing out the talents in our students through articles, poems, quizzes and experiences. We at Array Express Encourage our students to put on their thinking caps and create.

"INSIDE ALL OF US IS A HIDDEN DREAM"

STAFF ARTICLE

MANY HANDS MAKE LIGHT WORK.

Ms.R. Meenakshi

M. Sc(ESC)., M. Phil(ESC)
Assistant Professor

Many hands make light work is true in many facets of our lives. I is always easier to finish a job when several people pitch in to get it one.

It is the concept of teamwork. Most companies boast of how teamwork is the backbone of the company. That is because they have figured out that when you have “many hands” in the job it makes for a much lighter workload for everyone. You can see this come to light when you try to lift something heavy. If you try to lift it on your own, it isn’t just hard to do, it can cause you a great deal of injury. If you get more people involved in the process, the item becomes far less heavy to the one person who tried to lift it before. The more people involved in lifting the heavy object, the lighter it becomes until it could hardly be called hard work at all. You can do work by yourself. You may even make some progress. That doesn’t mean that it wouldn’t be easier if you had more people involved in it. There are those people that think working alone is much better. They feel that others get in the way and hold them up from anything being accomplished. That is only true if one of the team members is being lazy. If everyone works together, great things can get done in an amazingly short amount of time.

Ms.S. Abhirami

M.C.A., M.Phil., S.E.T.
Assistant Professor

SPORTS MANAGEMENT

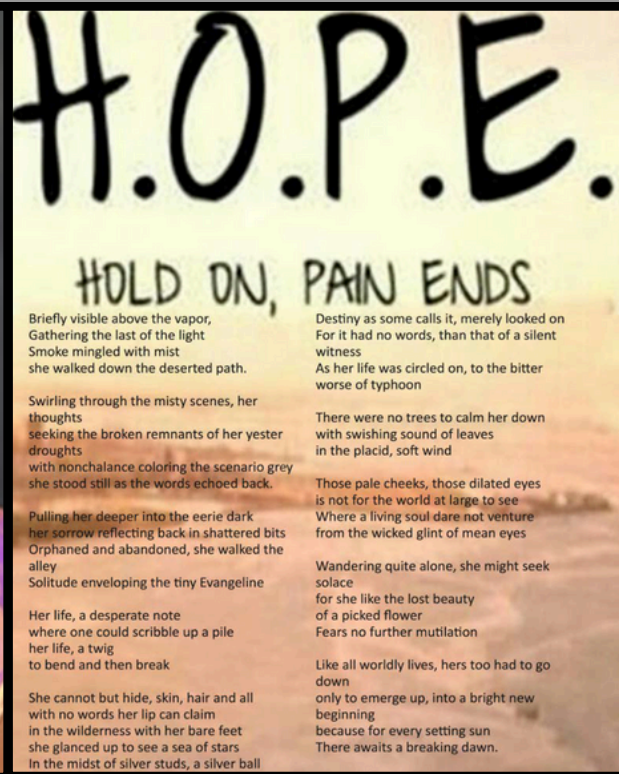
Sports management is the business of sports and recreation. Sports managers find numerous opportunities of working in professional teams, colleges, recreational departments and marketing firms.

SKILLS REQUIRED FOR SPORTS MANAGEMENT

- | | |
|----------------------------|--------------------------|
| ☒ Physical Fitness | ☒ Determination |
| ☒ High Energy | ☒ Enthusiasm |
| ☒ Passion for Sports | ☒ Management Skills |
| ☒ Stamina | ☒ Presentation Skills |
| ☒ Resilient and Optimistic | ☒ Collaborative Attitude |
| ☒ Keen Observation Skills | ☒ Time management skills |
| ☒ Patience | ☒ Sporting spirit |



STAFF ARTICLE



Ms.R. V. Rajiga,
M.C.A.,M.Phil.,
Assistant Professor

Computer is an electronic machine
It is our today's generation vision.
It is the boon to the society.
It role is like almighty.

Java is a powerful language.
It has the ability to collect the garbage.
C language consists of pointer.
Computer role is greater.

Cloud is a computer technology.
It is used to handle human psychology
Human can make an error.
Computer reflects it like a mirror.

Storage measured in bytes.
It makes today's world bright.
Man is made up of blood.
It makes our mind broad.

AI is a computer application
It gives human's life a new definition.
Computer is today's hero
Without it our world become zero.



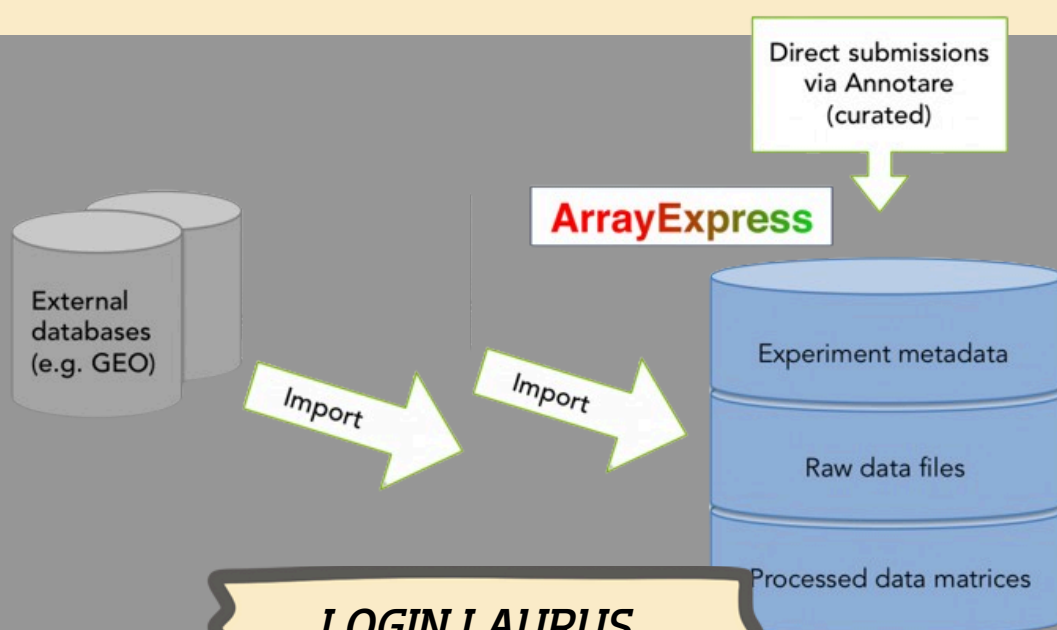
Ms.R. Kaviyarasi
M. Sc(CS)., MCA., MBA., M. Phil
Assistant Professor

ARRAY EXPRESS



ABOUT THE ASSOCIATION

LOGIN LAURUS “conserving victory” Association of the Department of Computer Science is a platform for computer pursuing students to enhance the interpersonal and leadership skills among the students. The Association also helps the students to keep in track of current trends in IT field by organizing and participating in various IT related events.



LOGIN LAURUS ASSOCIATION MEMBERS

MS. E. MANO RANJITHAM (VICE-PRINCIPAL & HOD)

MS. R. KAVIYARASI Assistant Professor

MS. R. MEENAKSHI Assistant Professor

MS. S. V.RAJIGA Assistant Professor

MS. S. ABHIRAMI Assistant Professor

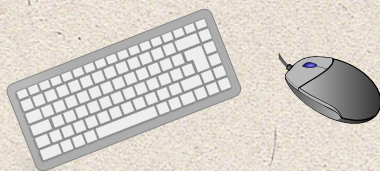
MR KAVIN MATHUS J (PRESIDENT)

HINDHUJA J (Secretary)

ODD SEMESTER

ORIENTATION PROGRAM

The Virtual Orientation program was organized for students from July 18th to 22nd, 2022. Each day featured a different topic, with orientations led by various staff members. The week-long event aimed to provide comprehensive guidance and information.



During the odd semester of the 2022-2023 academic year, a “Subject Orientation Program” was organized for students. The program featured orientation sessions led by subject handlers, who provided detailed information about the syllabus, scope, and outcomes of each subject. They also offered practical advice on how to study effectively and achieve high marks.

In addition to the subject-specific presentations, various engaging activities were held to involve students, who participated with enthusiasm. The program was designed to give students a thorough understanding of their courses and support them in their academic journey.



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E-WASTE MANAGEMENT AWARENESS PROGRAM

On August 18, 2022, the college, organized a “Session on E-Waste Management (EWM) Awareness Program” for first-year students. Mr. D. Parveen of III B.Sc (CS) discussed the impacts of E-Waste on society, including its accumulation and classification.

Ms. V. Nandhini of III B.Sc (CS) highlighted various types of pollution caused by E-Waste, such as contamination of water, air, and soil, using practical examples to illustrate its environmental effects. The session successfully raised E-Waste awareness among second and third-year students as well.



UPSKILL LEARNING MICROSOFT OFFICE

On July 1, 2022, the Department hosted a PowerPoint Workshop aimed at enhancing participants' abilities to create effective and visually appealing presentations. The workshop was designed to deepen knowledge and proficiency in using PowerPoint, covering essential features and techniques.

Participants learned about aligning text, cropping and resizing images, and utilizing common shortcuts. The workshop also included instruction on slide transitions and animations, inserting audio files, creating hyperlinks, and collecting feedback, providing a comprehensive skill set for mastering PowerPoint presentations.

CYBER SECURITY AWARENESS PROGRAM

On August 29, 2022, an Awareness Program on “Cyber Security” was held in association with IQAC, as part of the Cyber Week Celebrations. The Department of Computer Science initiated the program at Government School, Arikempet, targeting IV and V grade students. Ms. Josephine Musika and Mr. Gibson Sharon from III B.Sc. CS educated the students on cyber security and data protection against cyber crimes, while Mrs. Nandhini and Mr. Parveen from III B.Sc. CS discussed E-Waste Management and proper disposal methods. The students engaged actively, and their feedback was very positive, indicating a successful increase in awareness about both cyber security and E-Waste Management.



TECH WEEK INTRA DEPARTMENT QUIZ

On January 27, 2023, an “Intra Department Quiz” was organized. 21 students participated, with quiz questions covering General Knowledge, Aptitude, and Current Trends in IT. Certificates were awarded to students who scored above 60%. The quiz proved to be both informative and engaging, with all students participating actively. For final-year students, it provided a valuable opportunity to prepare for aptitude tests required for placements. For first- and second-year students, it offered insights into current technological trends, creating awareness and enhancing their knowledge. Overall, the event effectively combined learning with practical application, benefiting students at various academic levels.



INTERNATIONAL PEACE DAY

The international peace day as part of SDG was organized on 21 Sep 2022. This global observance highlights the importance of peace, which is characterized by a state of security and calmness amidst conflicts. Peace embodies values such as care, respect, and tolerance, and the day serves to both remember and promote these ideals worldwide.

The celebration commenced at 9:30 am with students dressed in white gathering at the assembly ground. The program began with a warm welcome from Ms. A. Rajalakshmi of III B.Sc. CS. Dr. E. Mary Angeline, Principal of Nazareth College of Arts and Science, addressed the gathering, encouraging students to be peaceful individuals in society and offering tips for maintaining a peaceful life. Ms. E. Mano Ranjitham, Vice Principal and Head of the Computer Science Department, led the oath-taking ceremony, with both staff members and students participating.

Mr. Stephen Raj, an alumnus and founder of Omega Exotic Pet Farm, was the guest of honor. The function was inaugurated with the symbolic release of doves by the guest, Secretary, Principal, Vice Principal, and staff members. Additionally, a documentary film featuring Anti-apartheid activist Nelson Mandela and Mother Teresa was screened to deepen students' understanding of peace. The event effectively conveyed the significance of such commemorative days and their impact on personal and societal peace.

LA CORSA 22-23 -DEPARTMENT ASSOCIATION PROGRAM (INTER COLEGATE MEET)

On October 21, 2022, the association function “La Corsa’22” was organized. The program featured both on-stage and off-stage events, including PowerPoint Presentation and Ad_Zap as on-stage activities, and Debugging, Art Out of Waste, Web Designing, and Algorithm to Flow Chart as off-stage events.

Judging these events were Mr. Anderson, Assistant Professor of English; Ms. Beula and Ms. Uma, Assistant Professors of Mathematics; Ms. Gomathi, Assistant Professor of Computer Application; Ms. Anjali, Assistant Professor of Business Administration; Ms. Divya, Assistant Professor of Commerce; Mr. Bhagat, Assistant Professor of Visual Communication; and Mr. Michael Raj, Lab Administrator. Ms. R. Meenakshi, Assistant Professor, introduced the resource person, Mr. Arulananda Selvakumar, Head and Vice President of Technology at Jio Payments, Chennai. He encouraged students to leverage their talents with support from their families, teachers, and surroundings, emphasizing the importance of seizing every opportunity for success. The session, attended by 270 participants, was informative and engaging, with winners and runners-up receiving prizes and certificates. Feedback was collected from students, and Mr. P. Maheshwar of III B.Sc. CS delivered the vote of thanks.



E-SHARING : SDLC IN INDUSTRY

Mrs. S. Abirami, Asst. Professor, and Coordinator introduced the Resource Person Mr. Vijay Dinakaran to the final year students and briefly explained his roles in his 11 years of IT industry.

The lecture provided a comprehensive overview of the Software Development Life Cycle (SDLC), detailing the roles and tools used by software developers at each phase. Over 30 different roles were discussed, including those in maintenance and support, with practical examples like the Nazareth College Website. Students gained clear insights into the necessary preparation for these roles. The Resource Person agreed to an additional offline session to explore the SDLC process in an industry setting.

EVEN SEMESTER

CYBER SECURITY

On February 22, 2022, a “Workshop on Cyber Security” was conducted in association with IQAC and IIC. The workshop featured Mr. Chandra Prakash Sankar, Founder and Director of Hackers Info Tech, Tirupur, who educated school and college staff, as well as students, on how to protect their devices and themselves from cyber threats.



INTRA DEPARTMENT QUIZ

On January 27, 2022, an “Intra Department Quiz” was organized. The quiz featured questions on General Knowledge, Aptitude, and Current Trends in IT, with a total of 21 students participating. Certificates were awarded to those who scored above 60%.

The event proved to be highly informative, with active participation from all attendees. For final-year students, the quiz served as a valuable preparation tool for aptitude tests in placements. For first- and second-year students, it provided important insights into current technological trends, enhancing their awareness and knowledge.

E-WASTE DISPOSAL ACTIVITY

On August 31, 2022, an Awareness Program on “E-Waste Management” was held, aiming to educate school and college students on proper e-waste disposal. The event featured a demonstration of disposal practices and was coordinated with Virogreen India Pvt Ltd, Chennai. Key figures, including Ms. Mano Ranjitham, Ms. Kaviyarasi, and other lab administrators, managed the handover of e-waste to Virogreen, who collected it the same day and transferred payment to the college account. The company committed to issuing a certificate within 30 days. The program successfully raised awareness about e-waste management.

TECH WEEK II

INTRA DEPARTMENT EVENT

An Intra Department Program titled “Tech Week II” was organized from September 29, 2022, to September 30, 2022. The event featured seven activities held on different days.

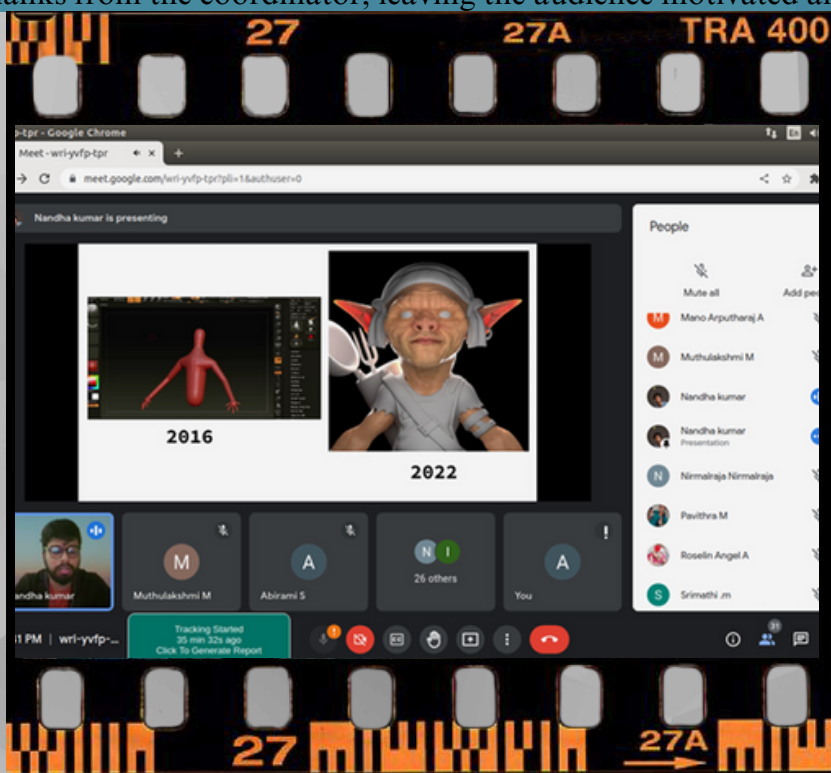
On Monday, the "Marvelous Monday" event focused on poster making. Tuesday's "Techy Tuesday" included a debugging challenge. Wednesday's "Wiki Wednesday" showcased website development. Thursday, dubbed "Tele Thursday," featured both debate and tech news events. Finally, "Fantastic Friday" concluded the week with technical poetry and a tech walk.



IIC WEBINAR : MY STORY – MOTIVATIONAL SESSION BY SUCCESSFUL INNOVATORS

The resource person recounted his journey from childhood to his current profession, beginning with how the movie *Avatar* inspired his passion for visual effects (VFX). Despite initially pursuing a degree in Electrical and Communication Engineering, he shifted his focus to Designing, Modeling, and Texturing in 2016. He presented his VFX work, explaining complex concepts like Invisible VFX, Rotoscoping, and Planar Tracking in a straightforward manner, which illustrated his growth and expertise in the field.

He encouraged students to leverage their imagination and pursue their passions, sharing his own experiences and challenges. Additionally, he provided advice on Rubik's Cube solving, recommending websites for learning algorithms and participating in events. The session ended with a Q&A and a vote of thanks from the coordinator, leaving the audience motivated and inspired by his journey.



E-SHARING : PROJECT MANAGEMENT

- "Effective e-sharing project management ensures seamless collaboration through integrated digital platforms."
- "Clear communication protocols and defined roles are crucial for successful e-sharing project execution."
- "Regular progress updates and feedback loops enhance efficiency and accountability in e-sharing initiatives."
- "Utilizing project management tools and analytics helps in tracking milestones and optimizing e-sharing workflows."

HIGH ACHIEVERS' PROGRAM

On January 31, 2023, a High Achievers Program was organized. The event was aimed at students from the III B.Sc. CS class. The event coordinator introduced Mr. Logesh Kumar, an alumnus of the Computer Science program at NCAS, as the resource person. Mr. Kumar shared his personal experiences and insights on successfully clearing the GATE examination. The session provided valuable guidance to the students, and a total of 60 students benefited from Mr. Kumar's expertise and advice.



E-WASTE DISPOSAL ACTIVITY

On February 3, 2023, an Awareness Program on "E-Waste Management" was organized as part of the E-Waste Management Project. The initiative aimed to educate school and college students and extend awareness to the public. In addition, E-Waste disposal activities were carried out at and around the Nazareth Institutions. The second E-Waste disposal event focused on managing waste from Nazareth Matriculation Higher Secondary School in Kamaraj Nagar, Avadi.

Ms. Kaviyarasi, Assistant Professor, contacted RV E-Waste Recycling Private Limited for an estimate on handling the e-waste. Ms. Mano Ranjitham, Vice Principal of Nazareth College of Arts and Science, and Ms. Aruna, Lab Incharge at Nazareth Matriculation Higher Secondary School, coordinated the transfer of the e-waste materials. The recycling company collected the waste on the same day, with payment processed through RTGS. The company also committed to providing a certificate of disposal within 30 days. This program successfully raised awareness among students about the proper disposal of e-waste.

ESSAY WRITING ON "TECHNOLOGY DAY"

On May 11, 2023, the Institution Innovation Council and Entrepreneurship and Development, in collaboration with the Computer Science program, organized an Essay Writing Competition to celebrate National Technology Day. Was aimed specifically at Computer Science students and focused on technology-related themes. National Technology Day commemorates the anniversary of India's first nuclear tests under Operation Shakti and is a significant occasion to highlight the country's scientific achievements. It serves as a reminder of the progress made in science and technology and celebrates the contributions of those advancing these fields.

The competition was designed to promote the advancement of science and technology while engaging students with a unifying theme that attracts youth. Students were briefed on the competition rules, and over 25 students participated. The top three essays were selected and awarded, providing valuable insights into the intersection of culture and technology. A total of 28 students and 5 faculty members were involved in the event. The program highlighted that technology, as an application of scientific knowledge, is crucial for solving real-world problems and making practical advancements in industry.

TECHNOLOGY

K. Keerthana
II - BSC

Technology is the application of knowledge towards achieving practical goals in a reproducible way. In the world technology can also mean the products resulting from such efforts, including both tangible ones such as utensils or machines and the intangible ones such as software. Technology plays a critical role in science, engineering, and everyday life. Technological achievements have led to significant changes in society. The invention of the wheel in the Bronze age allowed for the development of the first cities.

EDITOR'S PAGE

Most of the good programmer do programming not because they expect to get paid or to get adulation by the public, but because it is fun to program.

I got a lot of experience form designing
this newslet.

RAHUL V
1st B Sc C.S.

This is the outcome of long term effort of
all the people who supported me and
helped me to complete this newslet.

```
if (brain!=empty)
{
    keepCoding();
}
else
{
    orderCoffee();
}

While (doubt)
{
    exercise;
    if (tired) break;
    sweat it out;
}
```



RAHUL V

Hand on experience and computer science

Professional leadership with ethical values



BEST PRACTICES

- E-SHARING
- VIRTUAL LEARNING
- PEER UPDATE
- E-WASTE AWARENESS AND MANAGEMENT
- CYBER SECURITY AWARENESS AND HANDS-ON TRAINING



**SURVIVE FOR
PROGRESS NOT FOR
PERFECTION**



**No matter how powerful you become,
don't try to shoulder everything alone.
If you do, you will surely fail.**