

Softwares Applications



اللَّهُمَّ ارْزُقْنِي عِلْمًا نَافِعًا وَاسِعًا عَمِيقًا

اللَّهُمَّ ارْزُقْنِي رِزْقًا وَاسِعًا حَلَالًا طَيِّبًا
مُبَارَكًا مِنْ عِنْدِكَ

Review

1. What is **Machine**?
2. What type of **Input** we can give to Computer?
3. What is **Difference** between computer and other machines?
4. What is **Programming** ?



What is Software?

Difference between hardware and software.



VS



What a Software Does?

It solves a problem that help humans to perform their task more easily.

Categories of Software?

- System Software (like Android)
- Application Software (like Whatsapp contact book)



Application
software

vs.



System
software

Type of Application Softwares?

Some of more relevant are:

- Business Applications
- Games
- Social Media Apps

How People use **Softwares**?

- Console Based Applications
- Desktop Based Applications
- Web Based Applications
- Mobile Apps

Console Based Softwares?

```
Administrator: Command Prompt - uams
*****
*          University Admission Management System
*****
Main Menu >
-----
Select one of the following options number...
1. Add New Student Record
2. View all Records
3. Print the Record in Merit Order
4. Generate Merit List
5. Program Seat Management
6. Exit
Your Option..
```

Desktop Based Softwares?



Web Based Softwares?

SAVE MORE ON APP DARAZ AFFILIATE PROGRAM SELL ON DARAZ CUSTOMER CARE TRACK MY ORDER LOGIN SIGNUP

daraz Search in Daraz DOWNLOAD THE DARAZ APP

Electronic Devices Electronic Accessories TV & Home Appliances Health & Beauty Babies & Toys Groceries & Pets Home & Lifestyle Women's Fashion Men's Fashion Watches, Bags & Jewelry Sports & Outdoor Automotive & Motorbike

WINTER COLLECTION 2020
Refresh Your Wardrobe

SHOP NOW >

DarazMall dMart Fashion & Lifestyle Global Collection Digital Sahulat

Flash Sale

On Sale Now Ending in 11 : 22 : 46 SHOP MORE

Pack of 12 Dayfresh UHT Milk 1 Ltr Rs.1,575	Bluetooth S530 Mini Bluetooth Wireless Stereo... Rs.329	I7 mini Single Wireless Bluetooth Earphone + Fre... Rs.399	Bluetooth function EAGEZAP Bluetooth 4.0 Bluetooth Mini Wireless Stereo... Rs.280	Giftnest Customised Keychain with Your Own Picture - Double Rs.127	SAMSUNG SAMSUNG Transfer Box BAR PLUS 32 GB Samsung BEST 32GB BAR Plus Metal USB 3.1 Flash... Rs.569
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Console Based Business Application

Problems

How to give students admission based on their merit ?

University Admission Management System

```
Administrator: Command Prompt - uams
*****
*          University Admission Management System
*****
Main Menu >
-----
Select one of the following options number...
1. Add New Student Record
2. View all Records
3. Print the Record in Merit Order
4. Generate Merit List
5. Program Seat Management
6. Exit
Your Option..
```

UAMS: Add Student

```
Administrator: Command Prompt - uams
```

```
*****  
*          University Admission Management System  
*****
```

```
Main Menu > Add Student
```

```
-----  
Enter Student Name.....Bilal  
Enter Obtained Marks in Matric.....1020  
Enter Obtained Marks in First Year..450  
Enter Ecat Marks.....300
```

```
***** Enter the Name from Following Programs *****
```

```
CS      SE      IT
```

```
*****
```

```
Enter First Preference.....CS  
Enter Second Preference.....SE  
Enter Third Preference.....IT
```

UAMS: View All Students

Administrator: Command Prompt - uams

```
*****  
*      University Admission Management System      *  
*****
```

Main Menu > Show All Students

Name	Matric	FYear	eCat	Merit	1st	2nd	3rd
Bilal	1020	450	300	83.6039	CS	SE	IT
Umer	1000	430	290	80.7413	CS	IT	SE
Hassan	980	430	280	79.5152	CS	IT	SE
Zubair	960	410	260	75.9026	CS	IT	SE
Akbar	950	400	250	74.0963	SE	IT	CS
Jabar	940	390	290	76.04	SE	IT	CS

Press any Key to Continue..

UAMS: Sort on Merit Score

Administrator: Command Prompt - uams

```
*****  
*      University Admission Management System      *  
*****
```

Main Menu > Student with Descending Order

Name	Matric	FYear	eCat	Merit	1st	2nd	3rd
Bilal	1020	450	300	83.6039	CS	SE	IT
Umer	1000	430	290	80.7413	CS	IT	SE
Hassan	980	430	280	79.5152	CS	IT	SE
Jabar	940	390	290	76.04	SE	IT	CS
Zubair	960	410	260	75.9026	CS	IT	SE
Akbar	950	400	250	74.0963	SE	IT	CS

Press any Key to Continue..

UAMS: Merit List

Administrator: Command Prompt - uams

```
*****  
*          University Admission Management System          *  
*****
```

Main Menu > Student Merit List

Bilal	Got Admission in CS With Merit 83.6039
Umer	Got Admission in CS With Merit 80.7413
Hassan	Got Admission in IT With Merit 79.5152
Jabar	Got Admission in SE With Merit 76.04
Zubair	Did not get Admission With Merit 75.9026
Akbar	Did not get Admission With Merit 74.0963

Press any Key to Continue..

UAMS: Seat Management

```
Administrator: Command Prompt - uams
*****
*          University Admission Management
*****
Main Menu >  Seat Management
-----
1. View All Seats
2. Increase Program Capacity
3. Add New Seats
4. Previous Menu

Enter the Option Number...
```

UAMS: Add Seats

```
c:\ Administrator: Command Prompt - uams
```

```
*****  
*          University Admission Management System  
*****
```

```
Main Menu > Seat Management > Add New Program
```

```
-----  
Enter the Program Name :CS  
Enter the Number of Seats :2
```

UAMS: View Seats

```
Administrator: Command Prompt - uams
*****
*          University Admission Management System
*****
Main Menu > Seat Management > View All Seats
-----
1.      CS      2
2.      SE      1
3.      IT      1
4.      CRP     1
Press any Key to Continue..
```

UAMS: Increase Capacity

```
c:\ Administrator: Command Prompt - uams
```

```
*****  
*          University Admission Management System  
*****
```

```
Main Menu > Seat Management > Increase Program Capacity
```

```
-----  
Enter the Program Name :SE
```

```
Enter Number of Seats :3
```

```
Seat Capacity been updated
```

```
Press any Key to Continue..
```

UAMS: Running Merit List Again

```
Administrator: Command Prompt - uams
```

```
*****  
*          University Admission Management System  
*****
```

```
Main Menu > Student Merit List
```

```
-----  
Bilal    Got Admission in CS With Merit 83.6039  
Umer     Got Admission in CS With Merit 80.7413  
Hassan   Got Admission in IT With Merit 79.5152  
Jabar    Got Admission in SE With Merit 76.04  
Zubair   Got Admission in SE With Merit 75.9026  
Akbar    Got Admission in SE With Merit 74.0963
```

```
Press any Key to Continue..
```

UAMS: Add with Preferences

```
c:\ Administrator: Command Prompt - uams
```

```
*****  
*          University Admission Management System      *  
*****
```

```
Main Menu > Add Student  
-----
```

```
Enter Student Name.....Babar  
Enter Obtained Marks in Matric.....930  
Enter Obtained Marks in First Year..410  
Enter Ecat Marks.....250
```

```
***** Enter the Name from Following Programs *****
```

```
CS      SE      IT      CRP
```

```
*****  
Enter First Preference.....CRP  
Enter Second Preference.....CS  
Enter Third Preference.....IT
```

UAMS: Generate Merit List Again

C:\ Administrator: Command Prompt - uams

```
*****  
*          University Admission Management System      *  
*****
```

Main Menu > Student Merit List

Bilal	Got Admission in CS With Merit	83.6039		
Umer	Got Admission in CS With Merit	80.7413		
Hassan	Got Admission in IT With Merit	79.5152		
Jabar	Got Admission in SE With Merit	76.04		
Zubair	Got Admission in SE With Merit	75.9026		
Babar	Got Admission in CRP With Merit	74.4383		
Akbar	Got Admission in SE With Merit	74.0963		

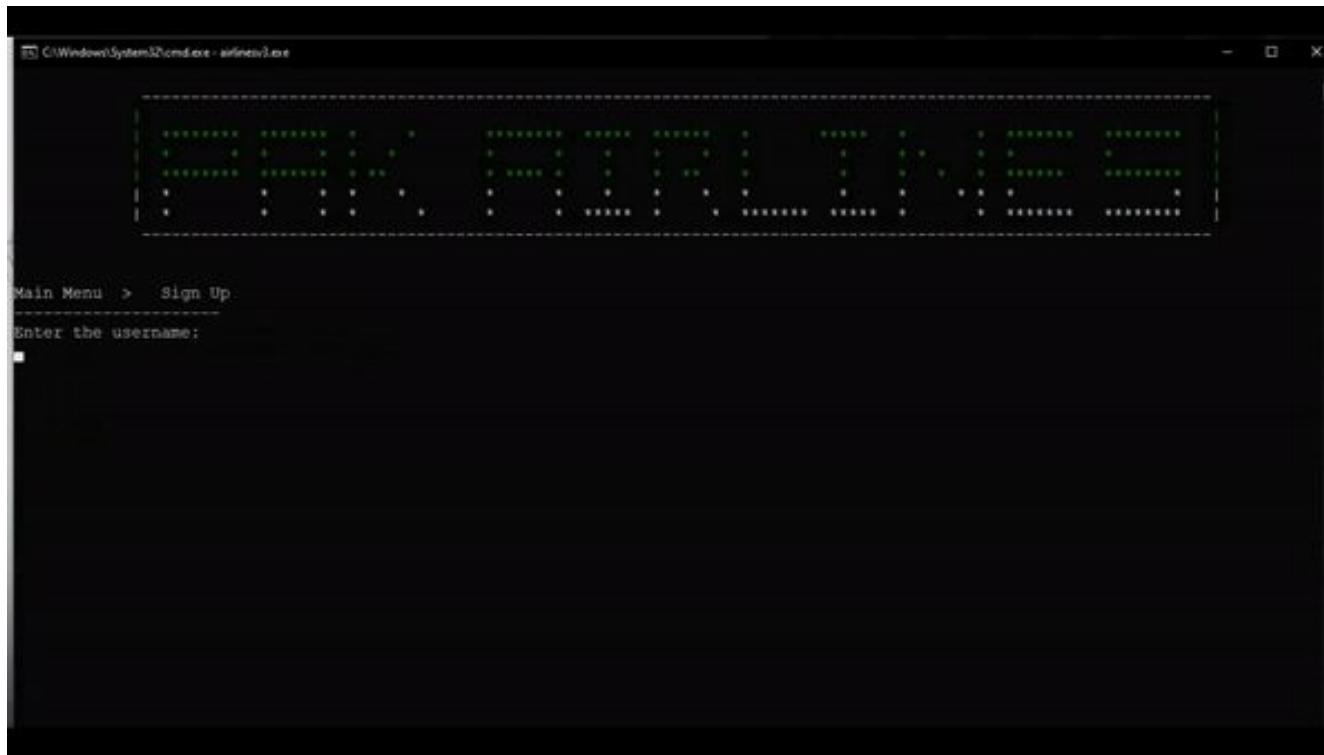
Press any Key to Continue..

UAMS: Generate Merit List Again

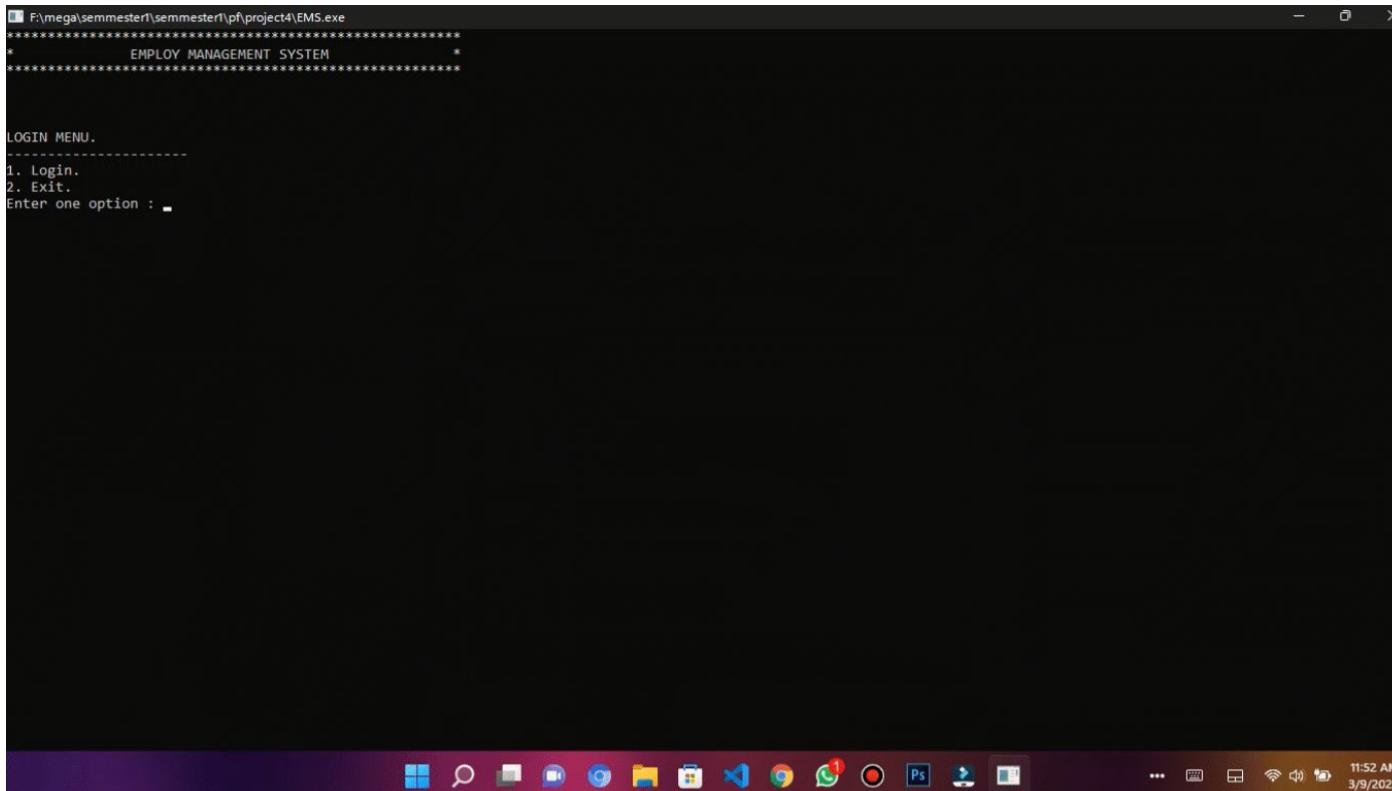
- Sports Goods Management System
- Bank Management System
- Doctor Appointment Management System
- Hostel Management System
- Ticketing System
- Point of Sale Application
- Vehicle Parking Management System

Students' Projects

Pakistan Airline Management System



Employees Management System



Punjab Education Foundation

```
C:\WINDOWS\System32\cmd.exe - PEF_FINAL_1.2.exe

::::::::::::::::::::::::::: PUNJAB EDUCATION FOUNDATION ::::::::::::
:::::::::::::::::::::::::::

User Panel > School Administration > View Students Data

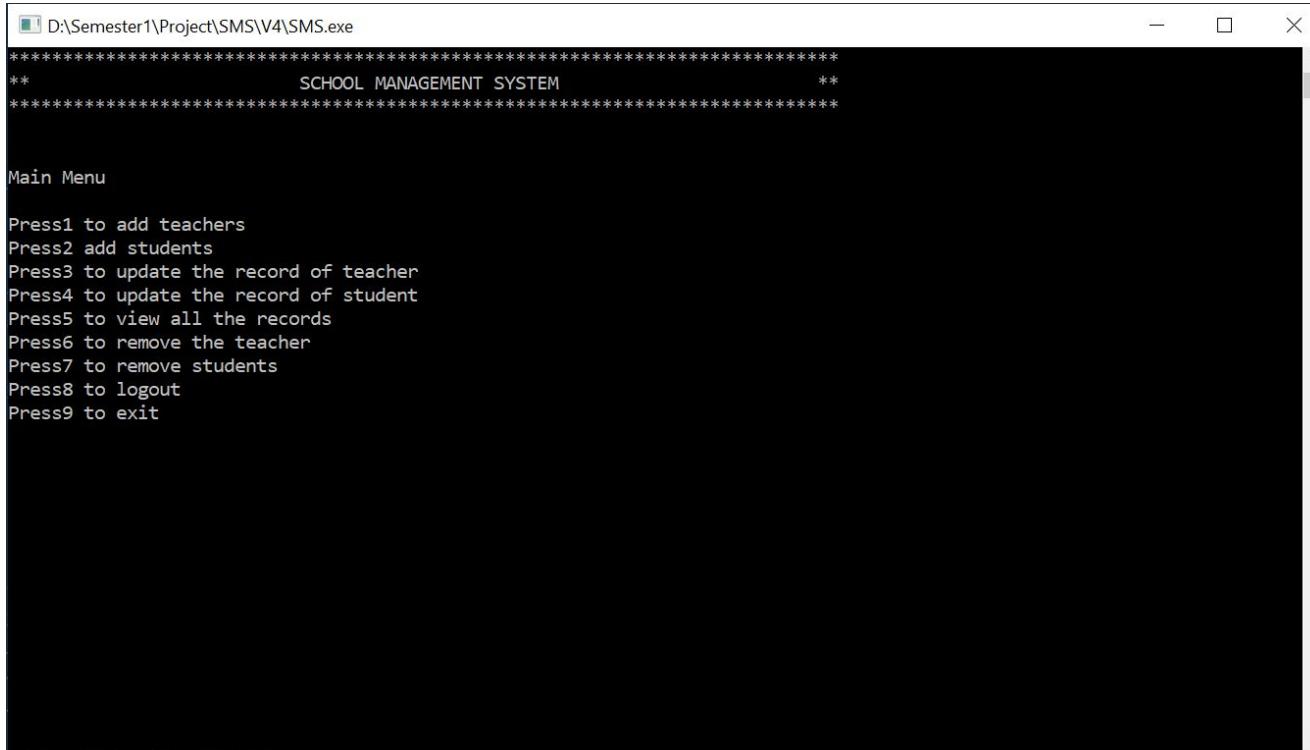
STUDENT RECORDS

Student Name    Father Name    Class    ENGLISH URDU      MATH    SCIENCE    ISLAMYIAT    TOTAL    PERCENTAGE
Hamid           Imran          6         99       99        99        99        99          495       99
Hamid           Imran          4         99       99        99        77        99          462       92.4
Qaim            Majid          6         88       88        88        77        88          429       85.8
Ali              khan          4         78       78        78        67        56          377       75.4
Ahmed           abd            7         78       78        78        56        45          324       64.8
> Hamid is THE BEST student of whole School.
> His father Name is Imran.
> His Class is 6.
> His Marks Percentage is 99.
> CONGRATULATION! Hamid on this GREAT acheivment.

Press any key to continue...■
```

Fabrics Shop Management System

School Management System



Inventory Management System

```
C:\Windows\System32\cmd.exe - IMS_Final.exe
Factory/Company name                                     Sat Feb 05 15:05:49 2022
*****
                                         INVENTORY MANAGEMENT SYSTEM
*****
Main menu>                                         (Admin)
1.Update users(workers)
2.Update products in stock
3.Search for products in stock
4.Out of stock products requests
5.Products Price Change Reports
6.Inventory usage log
7.Labor rates
8.Manufacturing cost calculator
9.Show all things in inventory
e.Exit

Enter your option: -
```

Console Based 2D Game

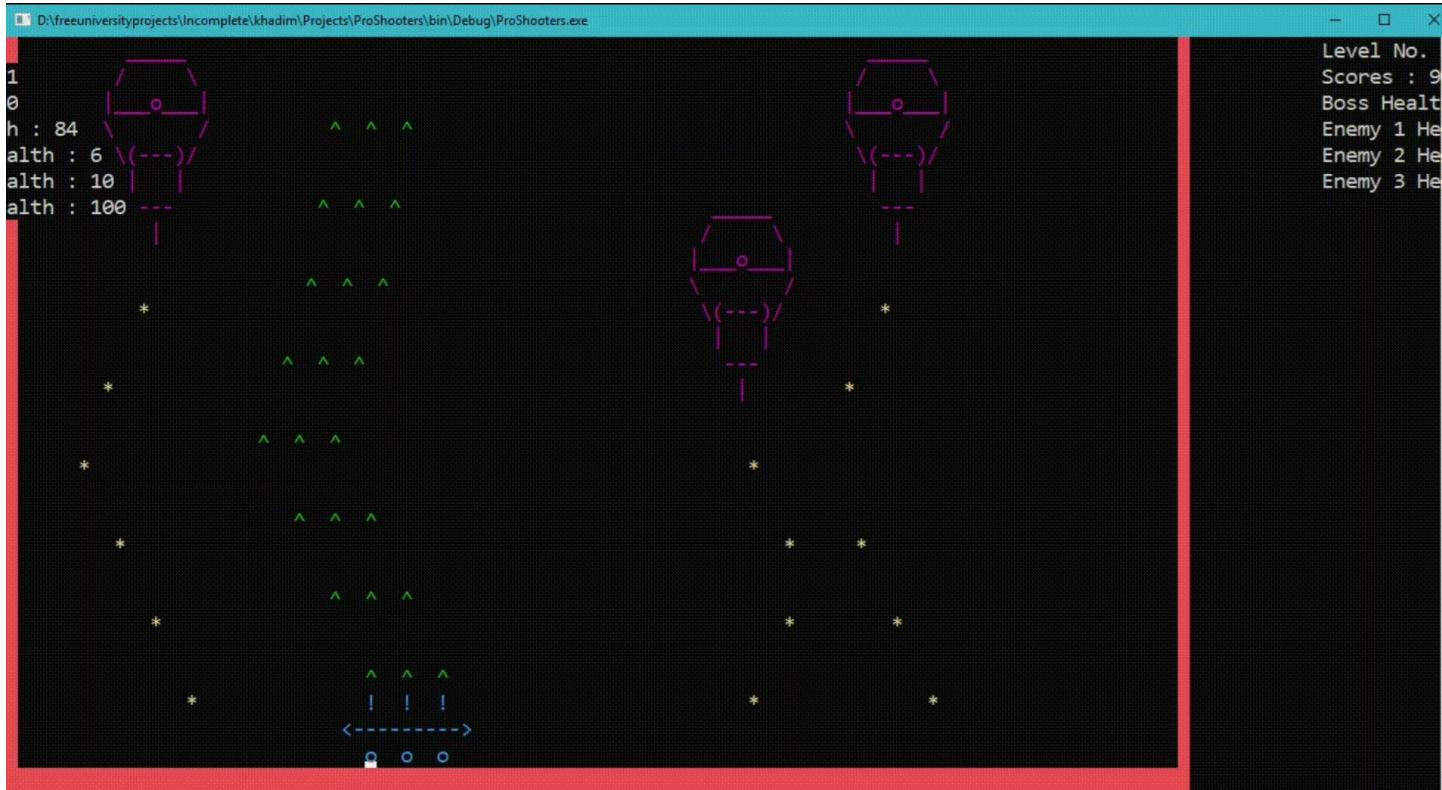
Pacman

How to convert Pacman Game to Computational Problem?

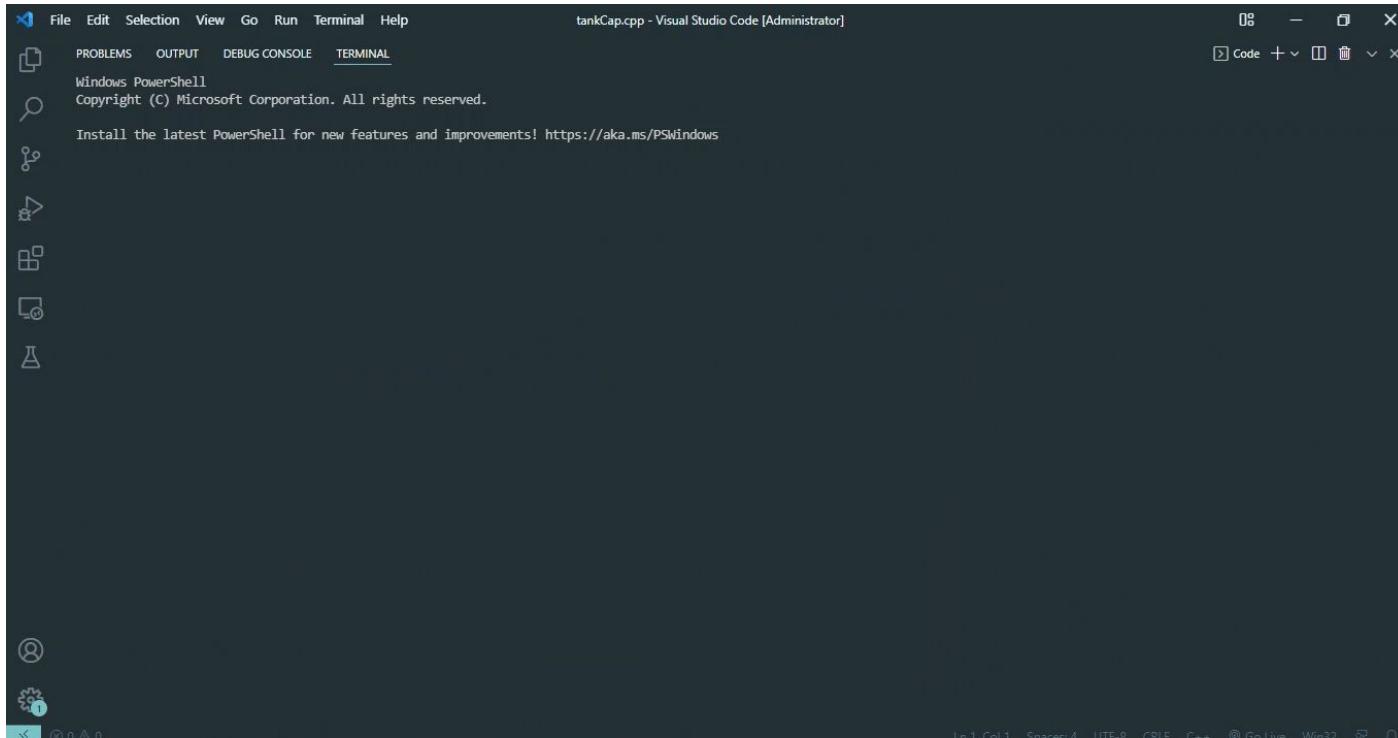


Students' Projects

Space Shooter



TankCap



Ping Pong



Tank Wars

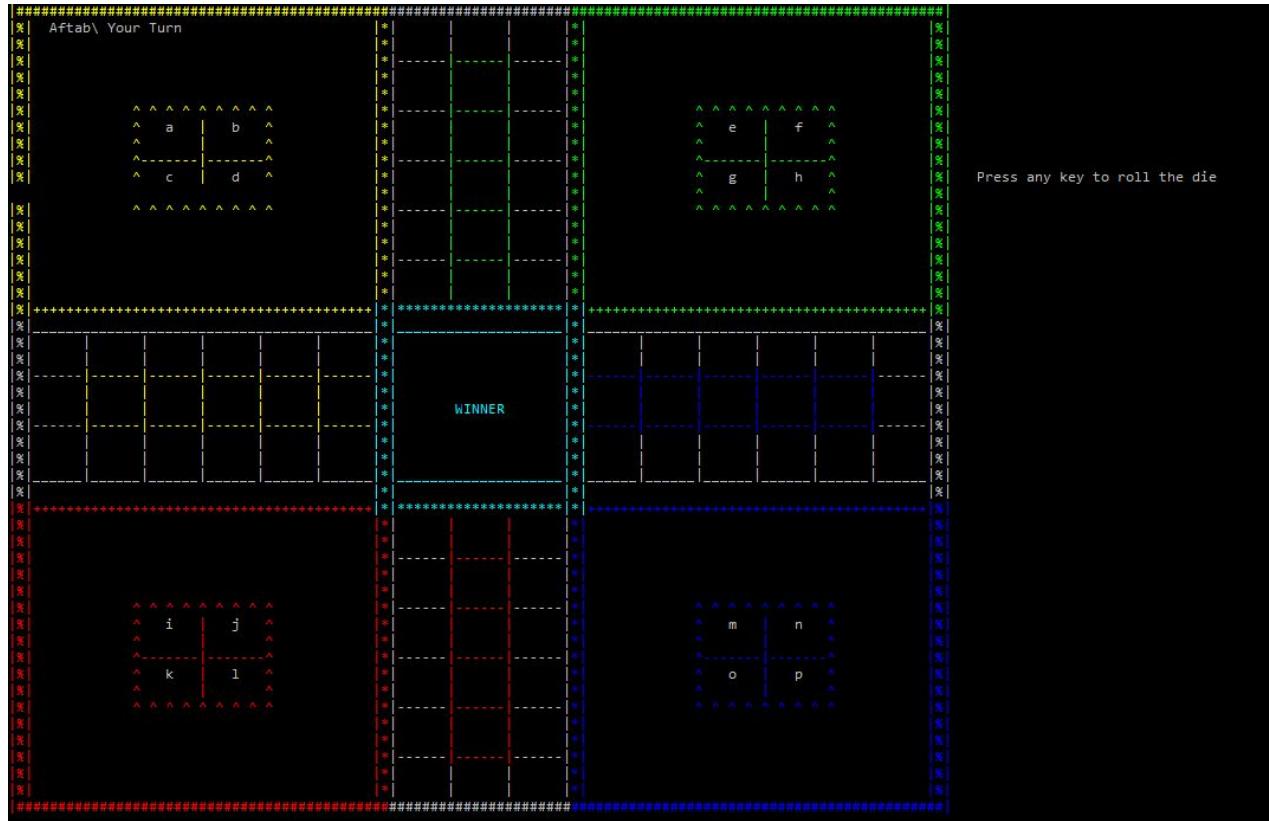
```
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```

-| | | | | |===== New Game
[| | | | | |]
\000000000000/

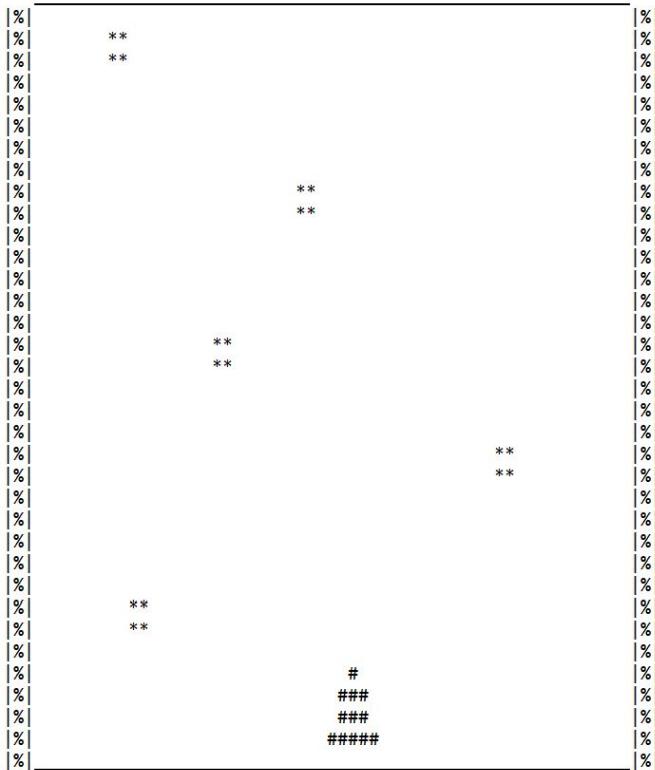
Instructions

Arrow keys to navigate Space key to Continue
Escape key to exit

Ludo



Car Racing Game



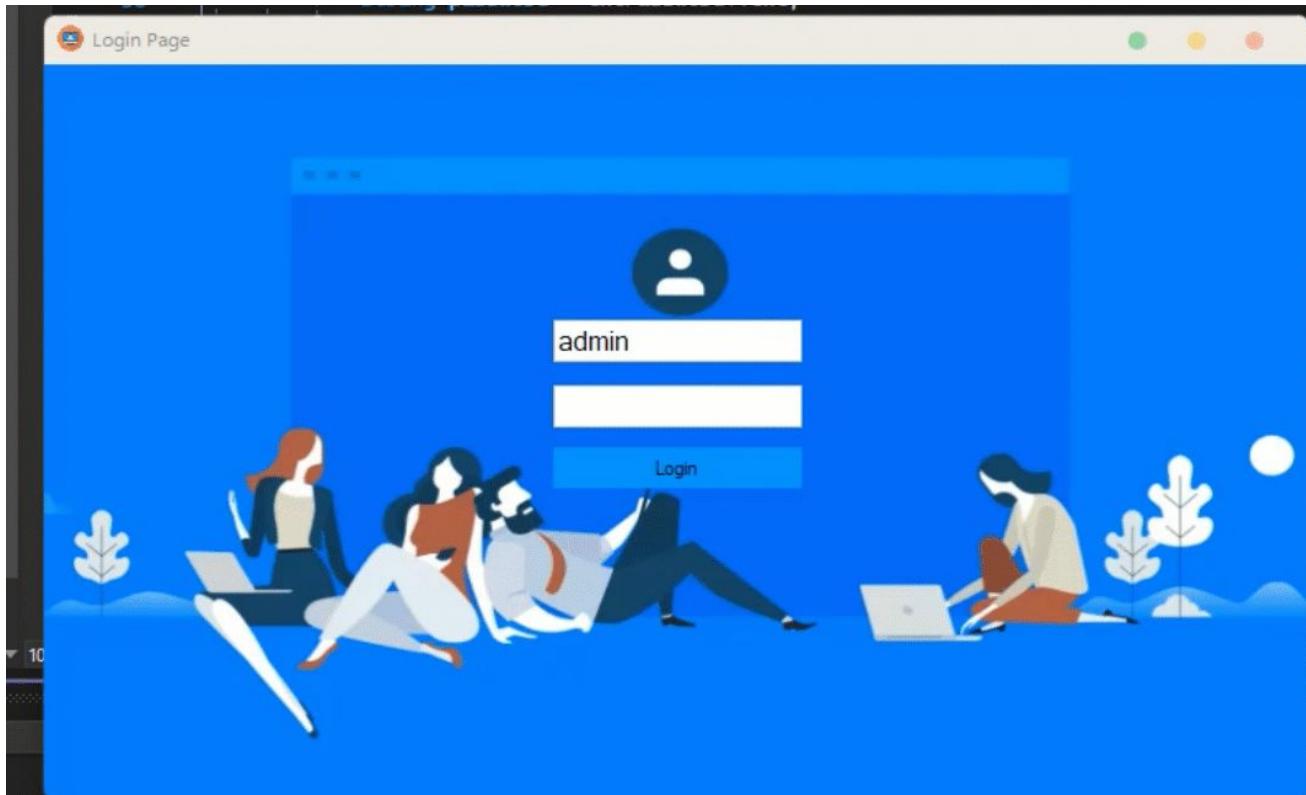
Score: 10

First Year Students Projects (Web and Desktop Applications)

Pakistan Airline Management System



Employees Management System



Learning Management System

The screenshot shows the 'USER DASHBOARD' of a Learning Management System (LMS). The interface is divided into several sections:

- Left Sidebar:** Contains icons for 'USER DASHBOARD' (selected), 'BOOK', 'BORROW BOOK', 'RETURN BOOK', and 'EXIT'.
- Main Header:** 'USER DASHBOARD' in large white letters on a purple bar.
- Central Form:** 'ADD A USER' form with fields for 'ROLE' (dropdown), 'NAME' (text input), 'USERNAME' (text input), and 'PASSWORD' (text input). Buttons include 'Auto Code', '@LMS.COM', and 'ADD'.
- Right Panel:** A table listing users with columns: EDIT, DELETE, Role, Name, UserName, and Password. The table contains the following data:

EDIT	DELETE	Role	Name	UserName	Password
EDIT	DELETE	ADMIN	MUHAMMAD SUBHAN	SUBHAN@LMS.COM	123456
EDIT	DELETE	ADMIN	MUHAMMAD ZAIN	ZAIN@LMS.COM	1234
EDIT	DELETE	ADMIN	HAIDER ALI	HAIDERALI@LMS.COM	123456
EDIT	DELETE	STUDENT	TEST	TEST123@LMS.COM	123456

Below the table, performance metrics are displayed:

- ADMIN: 3/75 %
- USERS: 1/25 %
- TOTAL: 4

Farm Management System

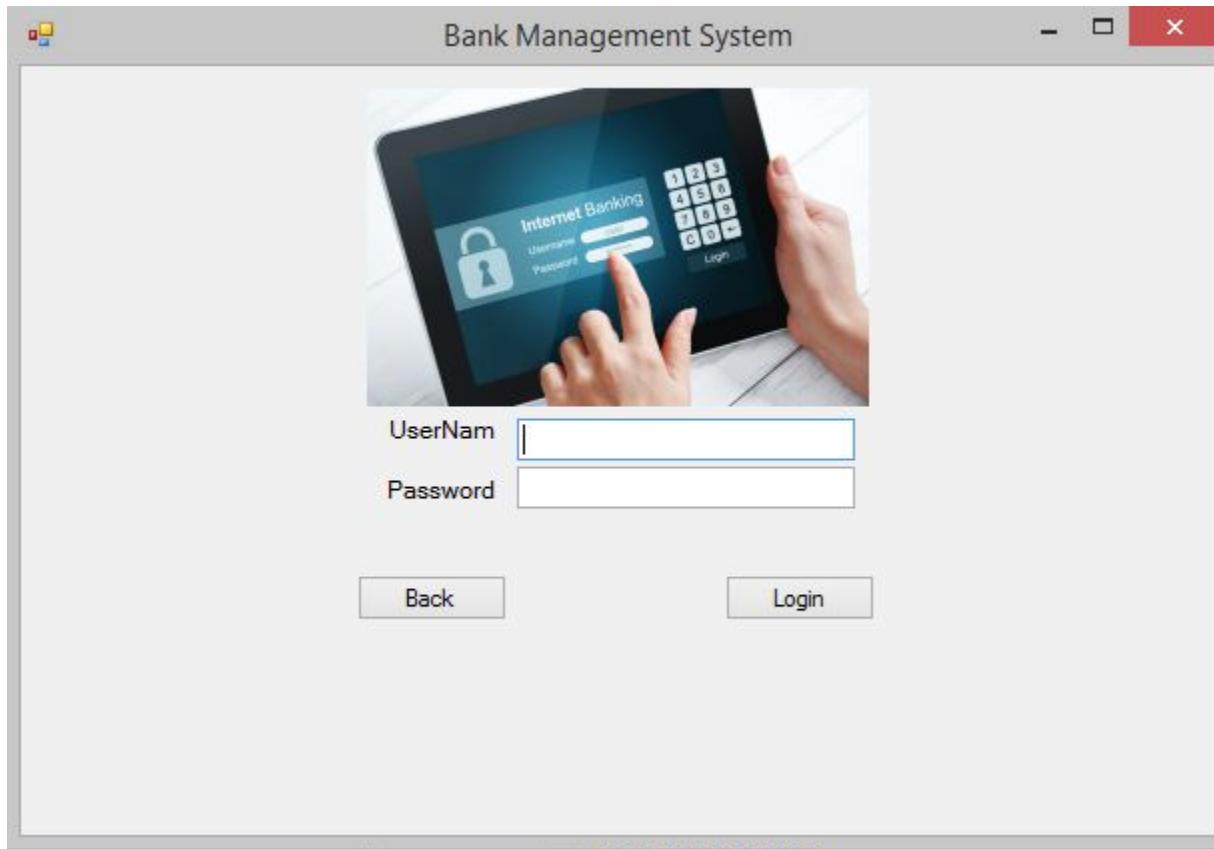


BE NATURAL FARM

	Add New User	Add New Organism	
	Update Health Of Organisms	Update Weight Of Organisms	
	Allocate Food For Organisms	Book Veterinary Appointment	
	Calculate Food Cost Of Farm	Add Eggs Produced	
	Add Milk Produced	Add Organism To Sales List	
	Calculate Total Worth Of Sales	Sort Organisms According To Increasing Weight	
	Sort Organisms According To Decreasing Weight	EXIT	

[Go Back Home](#)

Bank Management System



Shop Management System

CustomerForm

Logout Contact Us Change Account About Us ! Help

MUHAMMAD IBRAHEEM

Home Buy Products View Products Current Offers Generate Bill

Walmart Supercenter Happy Online Shopping

I am Looking For Cagatory...

Adidas Original Men's Shoes PKR 1800 PKR-3000+ 40 % off Buy

Dress Shirt Pure Cotton For Party PKR 1400 PKR-2000+ 20 % off Buy

Dress Suit Original Cotton PKR 13500 PKR-15000+ 10 % off Buy

Kurta Original Kurta Designs PKR 9000 PKR-10000+ 10 % off Buy

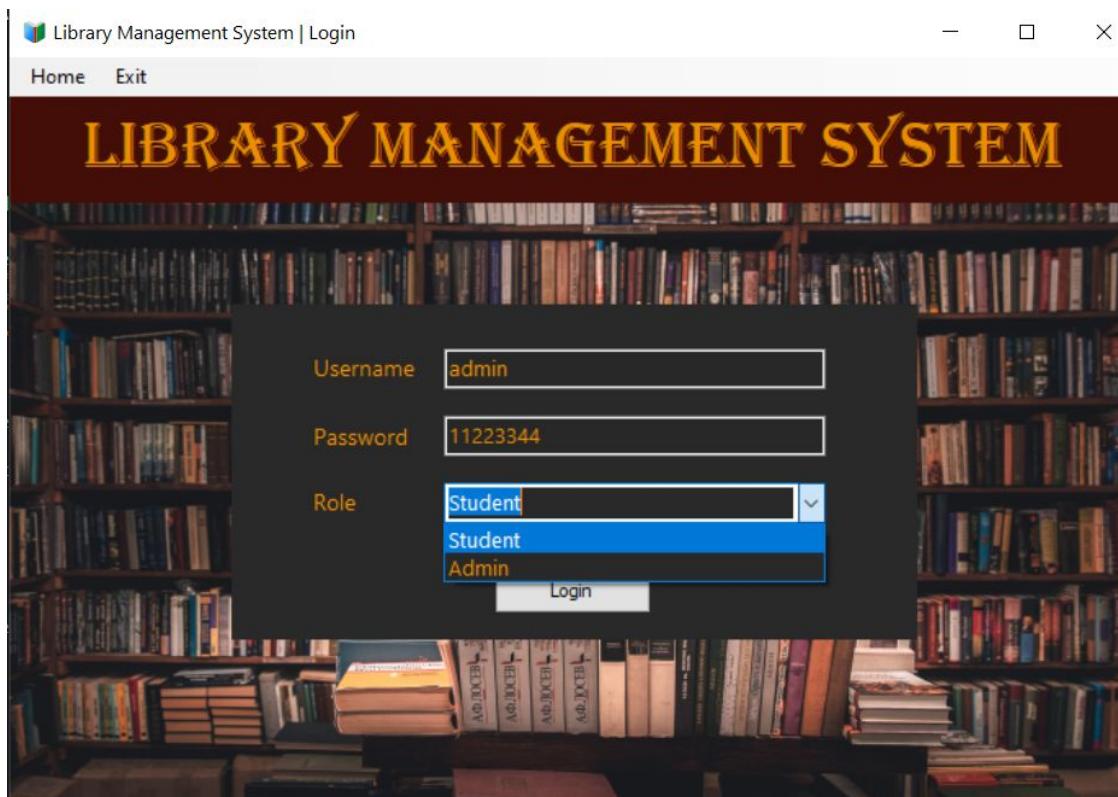
Buy

Buy

Buy

Buy

Library Management System



Inventory Management System

Admin-Update Products



Admin

- Update Users
- Update Products**
- Search Products
- Requests
- Price Reports
- System Log
- Labor Rates
- Inventory

Back

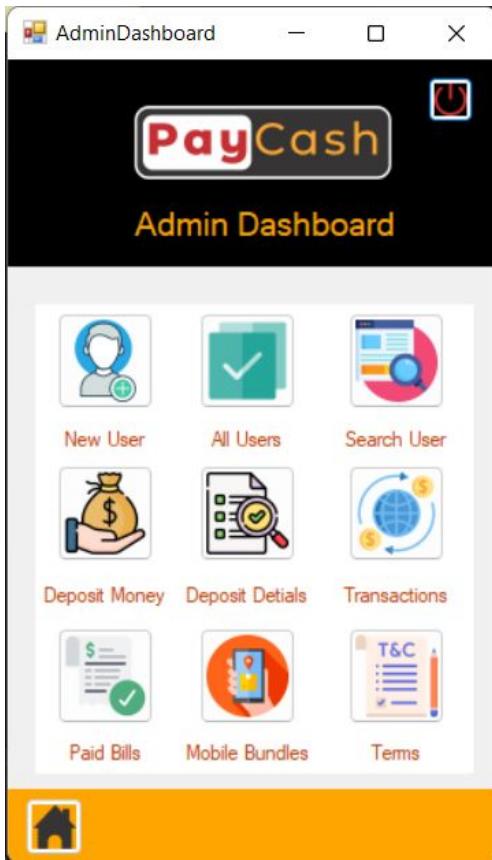
UpdateProducts

Name	Rate	Type	Qty	Edit	Delete
Leather	1200	m	1000	Edit	Delete
Cordura	1000	m	1500	Edit	Delete

Name	Rate	Type	Qty	Size	Edit
Buckles	10	a	10000	1.5	Edit
Rivets	2	a	15000	9	Edit
Dees	5	a	5000	2	Edit
Buckles	8	a	15000	1	Edit
Buckles	5	a	7500	0.75	Edit

Add New Product

PayCash Application



Punjab Education Foundation

frmSchool

PUNJAB EDUCATION FOUNDATION

Add Teacher
Add Student
Add Result
Attendance Report
View Teacher Data
View Student Data
View Announcement
Search Teacher
Search Student
Exit

Add Result

Enter the Name of School : Dar e Arqam

Enter the B-Form of Student : 1234567890127

Enter Total Marks of Subject : 100

Enter the Marks of English : 89

Enter the Marks of Urdu : 67

Enter the Marks of Maths : 99

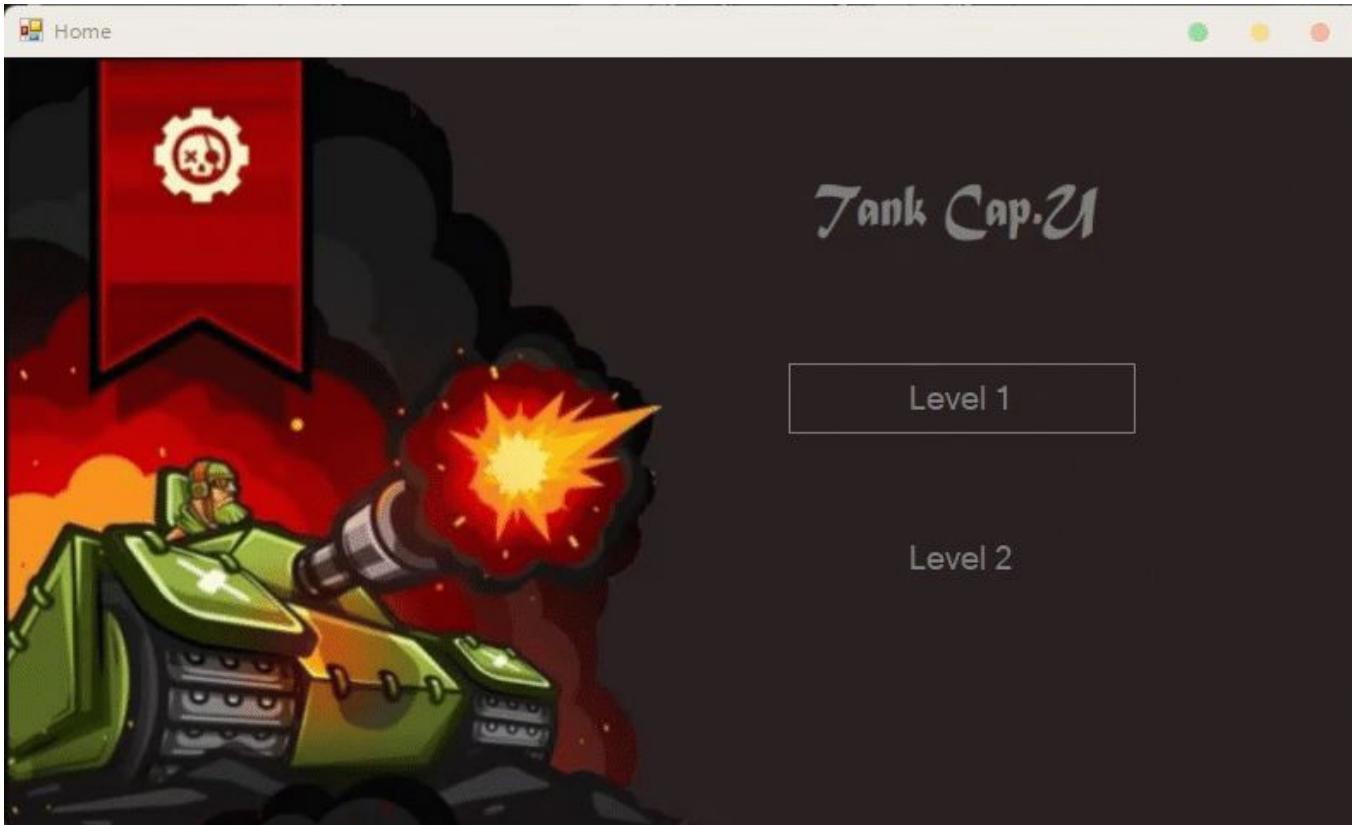
Enter the Marks of Science : 89

Enter the Marks of Islamiyat : 78

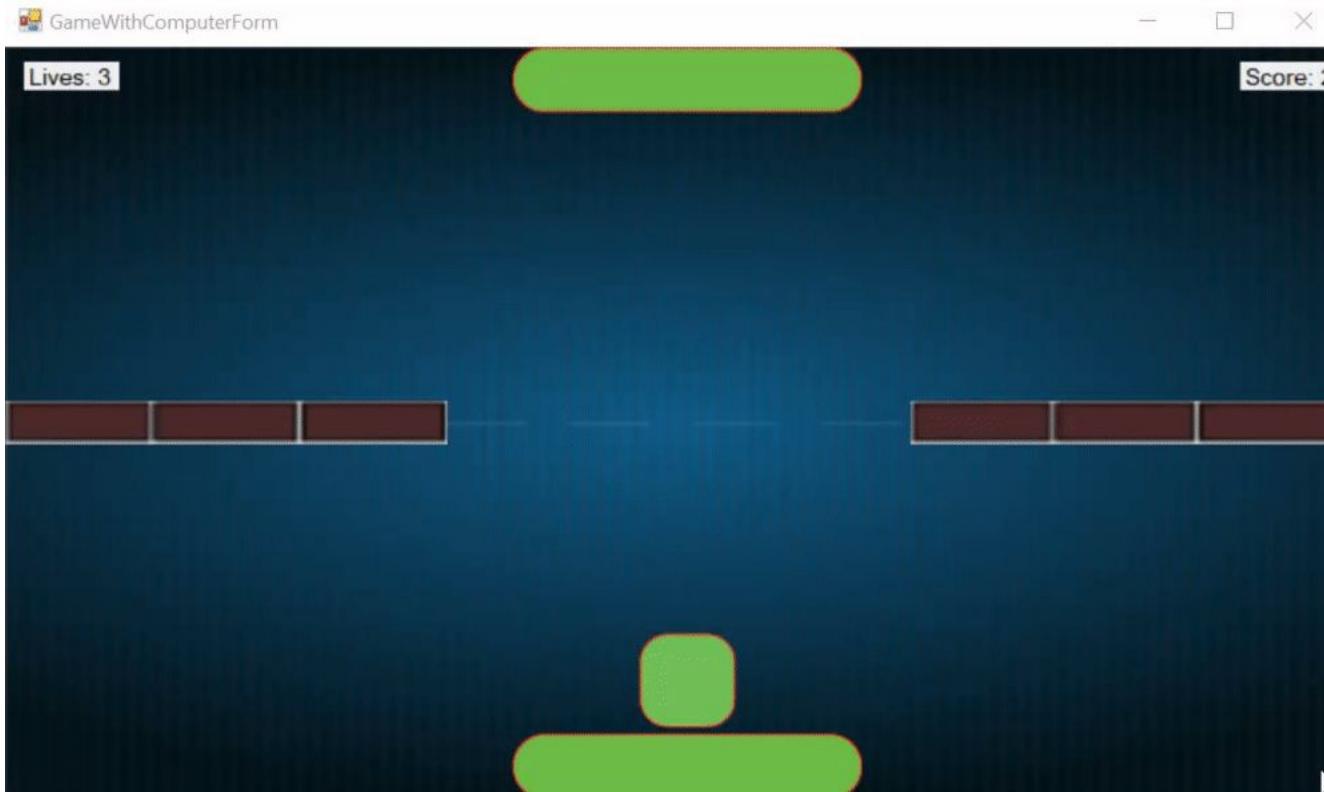
Total Marks : 422 And 84.4 %

Calculate Save

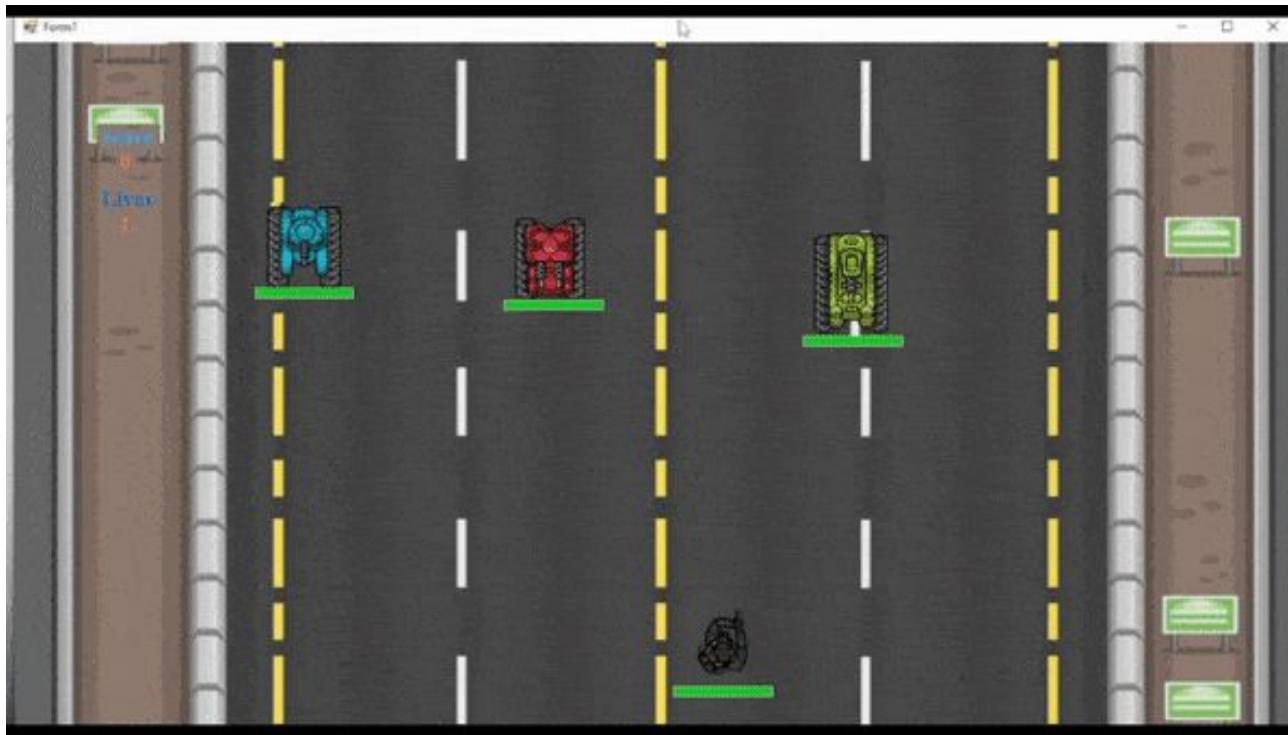
TankCap



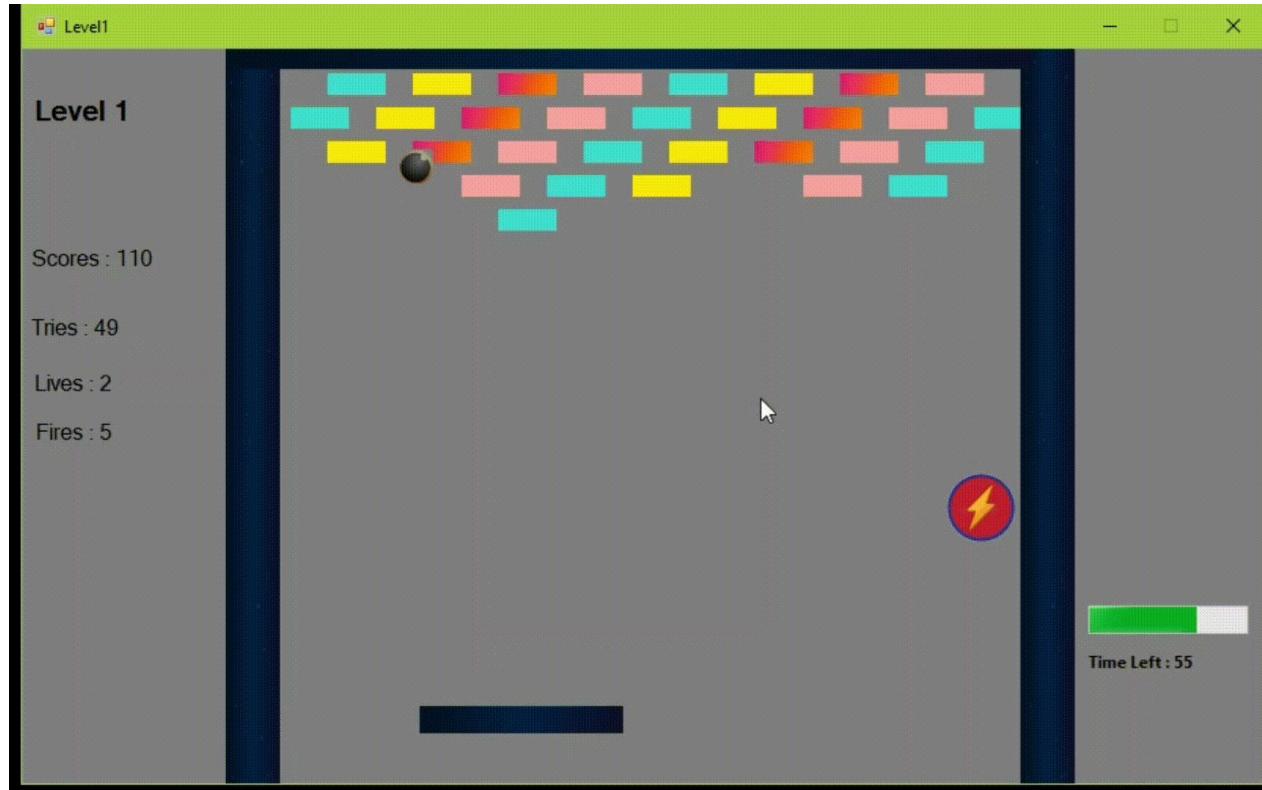
Ping Pong



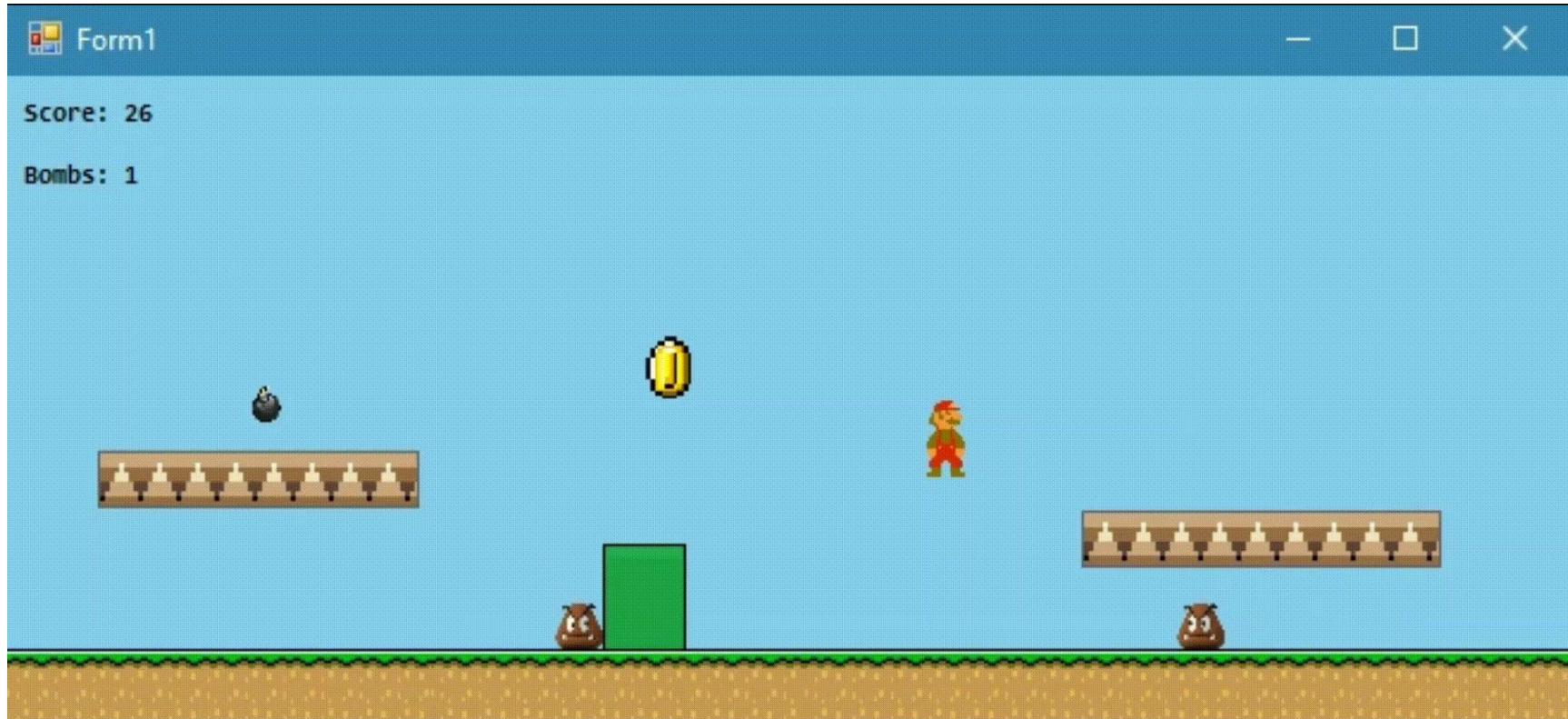
Fighting Game



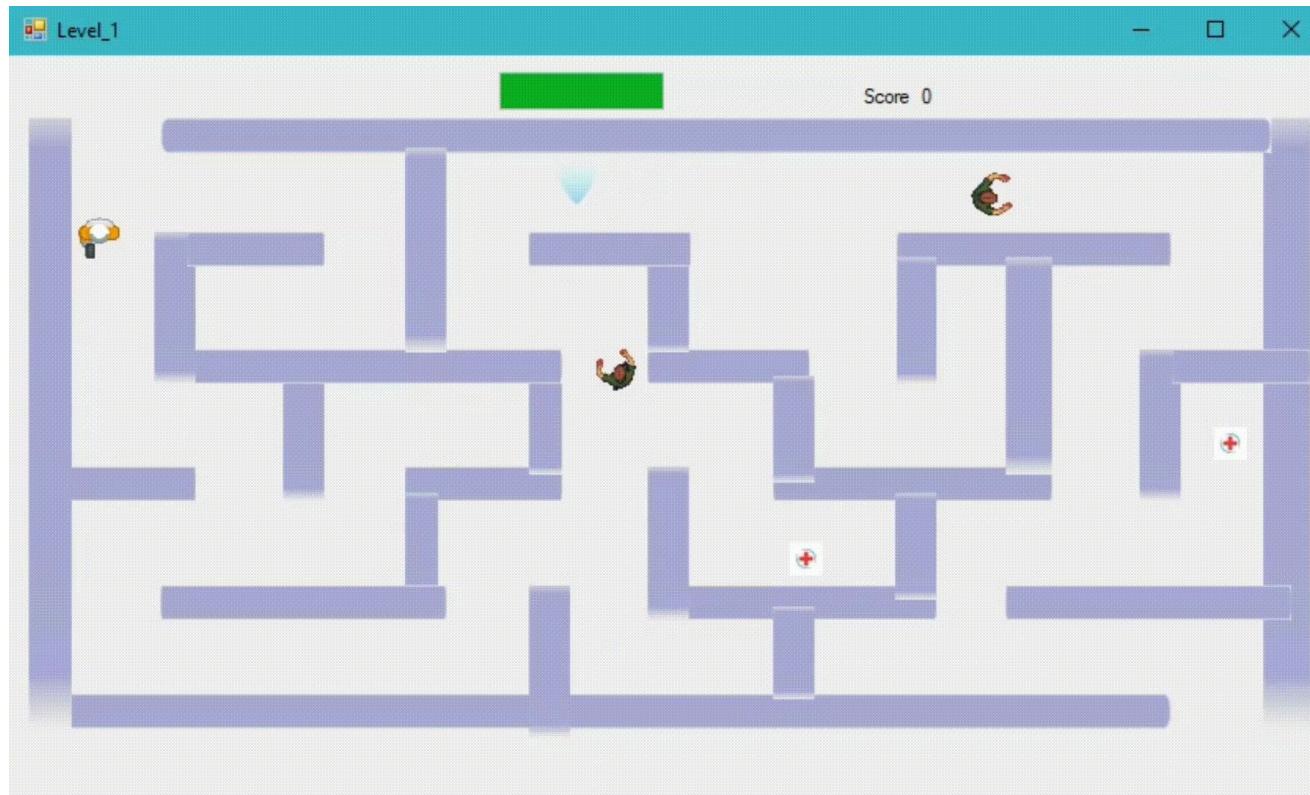
Brick Breaker



Super Mario



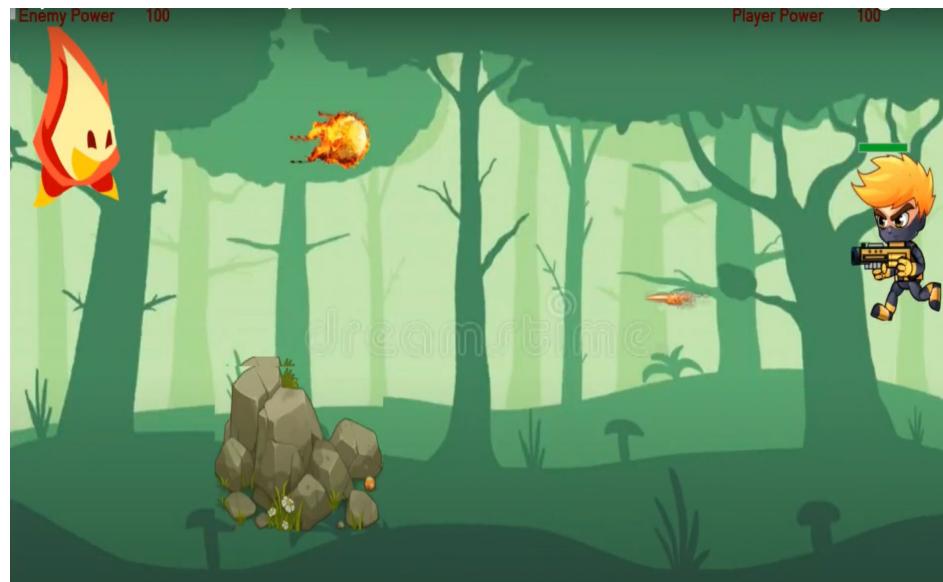
Fighting Game



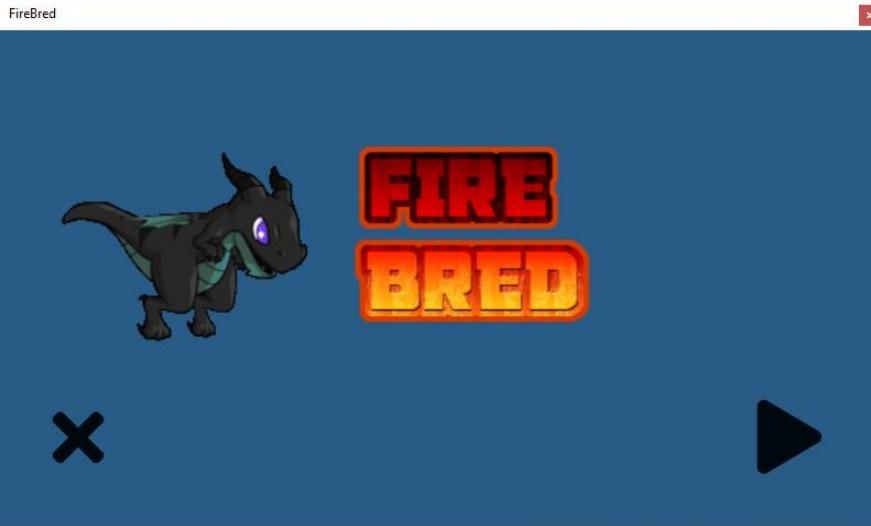
Sea Diver



Ninja Fighter



Dragon Fighter



Learning Objective

Students should be able to identify **what kind of softwares** they are going to develop in first year of computer programming



Self Assessment

1. What is the difference between **Software** and **Hardware**?
2. What is the difference between **System Software** and **Application Software**?
3. How people can use **Application Softwares**?
4. What is your **Goal**? What do you want to develop In your **1st year** journey?



Conclusion

- **Hardware** refers to the **physical and visible components** of the system such as a monitor, CPU, keyboard and mouse.
- **Software**, on the other hand, refers to a set of instructions which **enable the hardware** to perform a specific set of tasks.
- **System software** is used for operating computer hardware.
- **Application software** is used by user to perform specific Task.
- Users can used **CLI, Web, Desktop or Android** version of the user Application

