

**Week - 05** (04-09-2023) task

1. Define a person class that contains the following attributes and methods

| Person                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Attributes:</b><br>name<br>gender<br>address<br>aadharnumber<br>age                                                                                                         |
| <b>Methods:</b><br><b>getName()</b><br><b>setName(name)</b><br><b>getAddress()</b><br><b>setAddress(address)</b><br><b>setAadhar()</b><br><b>getAge();</b><br><b>display()</b> |

Write a c++ program to read person details and display the person details in the following format

Example:

```

Name           :      XYZ
Gender         :      Male
Address        :      VIJAYAWADA
AadharNumber   :      1234 5678 9123
Age            :      20 years
    
```

2. Define a student class that contains the following attributes and methods

| Student                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Attributes:</b><br>name<br>rollno<br>branch<br>CGPA                                                                                                                                                                          |
| <b>Methods:</b><br><b>getName()</b><br><b>setName(name)</b><br><b>getRollno()</b><br><b>setRollno(rollno)</b><br><b>setBranch(branch)</b><br><b>getBranch()</b><br><b>getCGPA()</b><br><b>setCGPA(cgpa)</b><br><b>display()</b> |

Write a c++ program to read student details and display the person details in the following format

```
Name           :      XYZ
Roll number    :      21501A0500
Branch         :      CSE
CGPA           :      8.49
```

3. Define a Course class that contains the following attributes and methods

| Course                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Attributes:<br>courseCode<br>courseName<br>courseType<br>semester<br>credits<br>maxIntMark<br>maxExtMark<br>marks                                                                                                                                                                                                                                                                                                                                                                 |
| Methods:<br><b>getCourseCode()</b><br><b>setCourseCode(code)</b><br><b>getCourseName()</b><br><b>setCourseName(name)</b><br><b>getCourseType()</b><br><b>setCourseType(type)</b><br><b>setSemester(sem)</b><br><b>getSemester()</b><br><b>getCredits()</b><br><b>setCredits(credits)</b><br><b>setMaxIntMarks(marks)</b><br><b>getMaxIntMarks()</b><br><b>setMaxExtMarks(marks)</b><br><b>getMaxExtMarks()</b><br><b>setMarks(marks)</b><br><b>getmarks()</b><br><b>display()</b> |

Write a c++ program to read student details and display the person details in the following format

```
Course Code      :      20CS3302
Course Name      :      Object Oriented Programming through C++
Course Type      :      Theory
Semester         :      III
Credits          :      3
Max Internal Marks :      30
Max Internal Marks :      70
Marks Obtained   :      84
```

4. Write a C++ program to display the courses information in the following format

| Course Code             | Title                                       | Credits     | L         | T        | P         | Internals  | Externals  | Total      |
|-------------------------|---------------------------------------------|-------------|-----------|----------|-----------|------------|------------|------------|
| 20BS1303                | Discrete Mathematical Structures            | 3           | 3         | 0        | 0         | 30         | 70         | 100        |
| 20CS3301                | Fundamentals of Digital Logic Design        | 3           | 3         | 0        | 0         | 30         | 70         | 100        |
| 20CS3302                | Object Oriented Programming through C++     | 3           | 3         | 0        | 0         | 30         | 70         | 100        |
| 20CS3303                | Computer Organization and Architecture      | 3           | 3         | 0        | 0         | 30         | 70         | 100        |
| 20ES1305                | Data Structures                             | 3           | 3         | 0        | 0         | 30         | 70         | 100        |
| 20CS3351                | Object Oriented Programming through C++ Lab | 1.5         | 0         | 0        | 3         | 15         | 35         | 50         |
| 20ES1356                | Data Structures Lab                         | 1.5         | 0         | 0        | 3         | 15         | 35         | 50         |
| 20CS3352                | Python Programming                          | 1.5         | 0         | 0        | 3         | 15         | 35         | 50         |
| 20SO8355                | Introduction to Linux Operating System      | 2           | 1         | 0        | 2         | --         | 50         | 50         |
| 20MC1301                | Environmental Sciences                      | 0           | 2         | 0        | 0         | 100        | --         | 100        |
| 20MC1341A/<br>20MC1341B | NSS / NCC                                   |             | 0         | 0        | 2         | ---        | --         | ---        |
| 20CS3391                | Community Service Project                   | 4           | 0         | 0        | 0         | --         | 100        | 100        |
| <b>Total</b>            |                                             | <b>25.5</b> | <b>18</b> | <b>0</b> | <b>13</b> | <b>295</b> | <b>605</b> | <b>900</b> |