**ASSIGNMENT #1**

**LOKESH CHINTHAKUNTLA- C0749681**

**#include**<iostream>

**#include**<string>//program uses standard c++ string class

**using** **namespace** std;

**class** college //college class definition

{

**public**:

**void** **setCourse**(string name) //function that sets the course name

{

Course=name; //stores course name in the object

}

string **getCourse**() **const** //function that gets the course name

{

**return** Course; //return the object's course

}

**void** **displayMessage**() **const** //function that displays a welcome message

{

cout<<"welcome to the college for \n"<<getCourse(); //this statements calls the getcourse to get the name of the course this college represents

}

**private**:

string Course; //course name for this college

}; //end class college

**int** **main**() //main function begins

{

**int** num1=420,num2=108,num3=911,num4=143,num5=100; //initializing numbers

**int** roll; //initializing integer variable roll

string nameOfCourse; //giving string characters

college mylambton; //create an object for class lambton

cout<<"initial course name is:"<<mylambton.getCourse(); //display initial value of program name

cout<<"\n please enter the course name";

**getline**(cin,nameOfCourse); //read program name with blanks

mylambton.setCourse(nameOfCourse); //set course name

cout<<**endl**;

mylambton.displayMessage(); //display message with new program name

cout<<"\nenter roll:"; //enter roll numbers of students

cin>>roll; // get roll number

**if**(roll==num1||roll==num2||roll==num3||roll==num4||roll==num5) //comparing the roll number with the pre defined numbers

cout<<"\nyou are in right course"; // executing true condition

**else**

cout<<"\nyou are in wrong course"; //executing false condition

}

**UML DIAGRAM**

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| --- |
| **COLLEGE** |
| **- COURSE** :String |
| +setcourse( name: string)  +getcourse(): string  +displayMessage() |

