**Q. Write a program that declares more than one function with same name but**

**different prototypes. Access these overloaded functions in your program depending on the values entered by the user at run time.**

#include <iostream>

using namespace std;

class Addition

{

public:

int sum(int a, int b)

{

return a + b;

}

int sum(int c, int d, int e)

{

return c + d + e;

}

};

int main()

{

int num1, num2, num3, num4, num5;

Addition obj;

cout<<"Enter value of num1 : ";

cin>>num1;

cout<<"Enter value of num2 : ";

cin>>num2;

cout<<"num1 + num2 : "<<obj.sum(num1, num2)<<endl;

cout<<"Enter value of num3 : ";

cin>>num3;

cout<<"Enter value of num4 : ";

cin>>num4;

cout<<"Enter value of num5 : ";

cin>>num5;

cout<<"num3 + num4 + num5 : "<<obj.sum(num3, num4, num5);

return 0;

}

//POLYMORPHISM - FUNCTION OVERLOADING

#include<stdio.h>

#include<iostream>

using namespace std;

class Student

{

public :

void display (int x)

{

cout<<"Integer is : "<<x<<endl;

}

void display (double y)

{

cout<<"Float is : "<<y<<endl;

}

void display (int x, double y)

{

cout<<"x : "<<x<<endl;

cout<<"y : "<<y<<endl;

}

};

int main()

{

Student s1;

s1.display(8);

s1.display(20.5);

s1.display(2,7.9);

}

// POLYMORPHISM - FUNCTION OVERRIDING

#include <iostream>

using namespace std;

class student

{

public :

void display()

{

cout<<"In base class"<<endl;

}

};

class data : public student

{

public :

void display()

{

cout<<"In derived class"<<endl;

}

};

int main()

{

data d1;

d1.display();

student s1;

s1.display();

}