

DSA 0136 OBJECT ORIENTED PROGRAMMING WITH C++ FOR SCANNING

DATE:29/08/2022

1)Write a c++ program for student report read three marks.Calculate the grade of a student.

using namespace std;

```
#include<iostream>
```

```
int main()
```

```
{
```

```
    int regno,m1,m2,m3,tot,avg;
```

```
    char name[20];
```

```
    cout<<"regno,m1,m2,m3,name";
```

```
    cin>>regno>>m1>>m2>>m3>>name;
```

```
    tot=m1+m2+m3;
```

```
    avg=tot/3;
```

```
    if (avg>=90)
```

```
    {
```

```
        cout<<"A grade";
```

```
    }
```

```
    else if (avg>80&&avg<90)
```

```
    {
```

```
        cout<<"B grade";
```

```
    }
```

```
    else if (avg>70&&avg<80)
```

```
    {
```

```
        cout<<"C grade";
```

```
    }
```

```
    else
```

```
    {
```

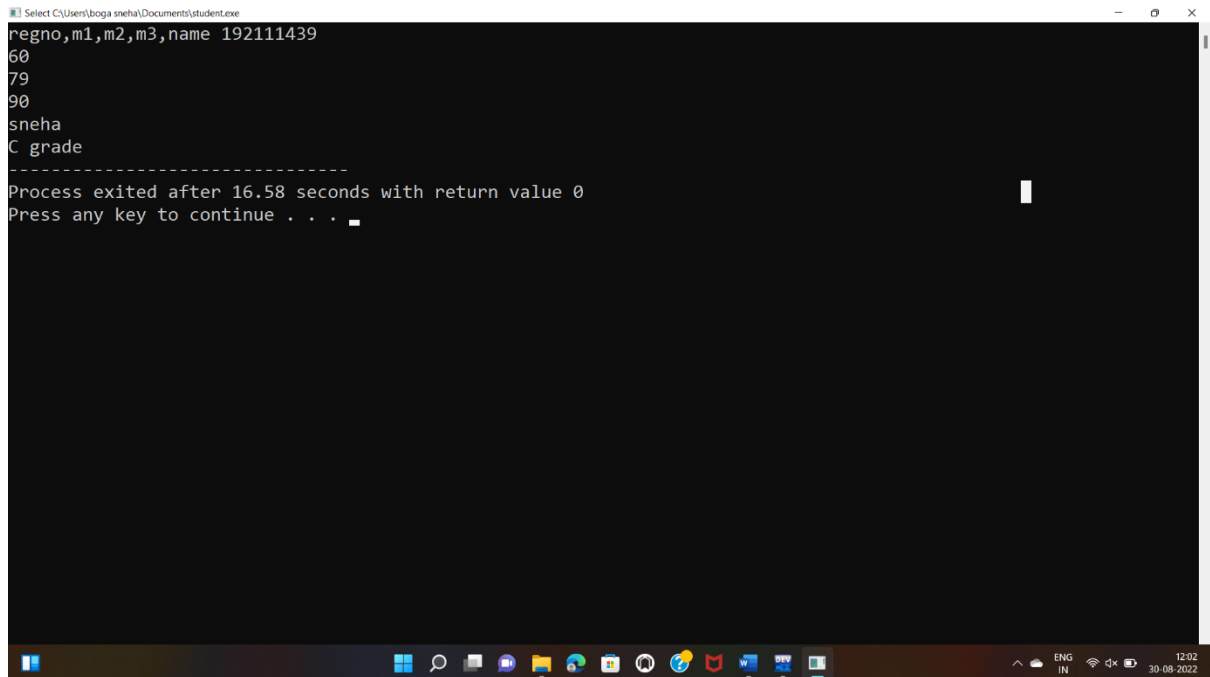
```
        cout<<"no grade";
```

```
    }
```

```
    return 0;
```

}

OUTPUT:



```
Select C:\Users\boga sneha\Documents\student.exe
regno,m1,m2,m3,name 192111439
60
79
90
sneha
C grade
-----
Process exited after 16.58 seconds with return value 0
Press any key to continue . . .
```

DATE:30/08/2022

1)Write a c++ program to perform sum of two numbers using class and object.

using namespace std;

#include<iostream>

class add

{

int x,y,z;

public:

void getdata();

void display();

};

void add::getdata()

{

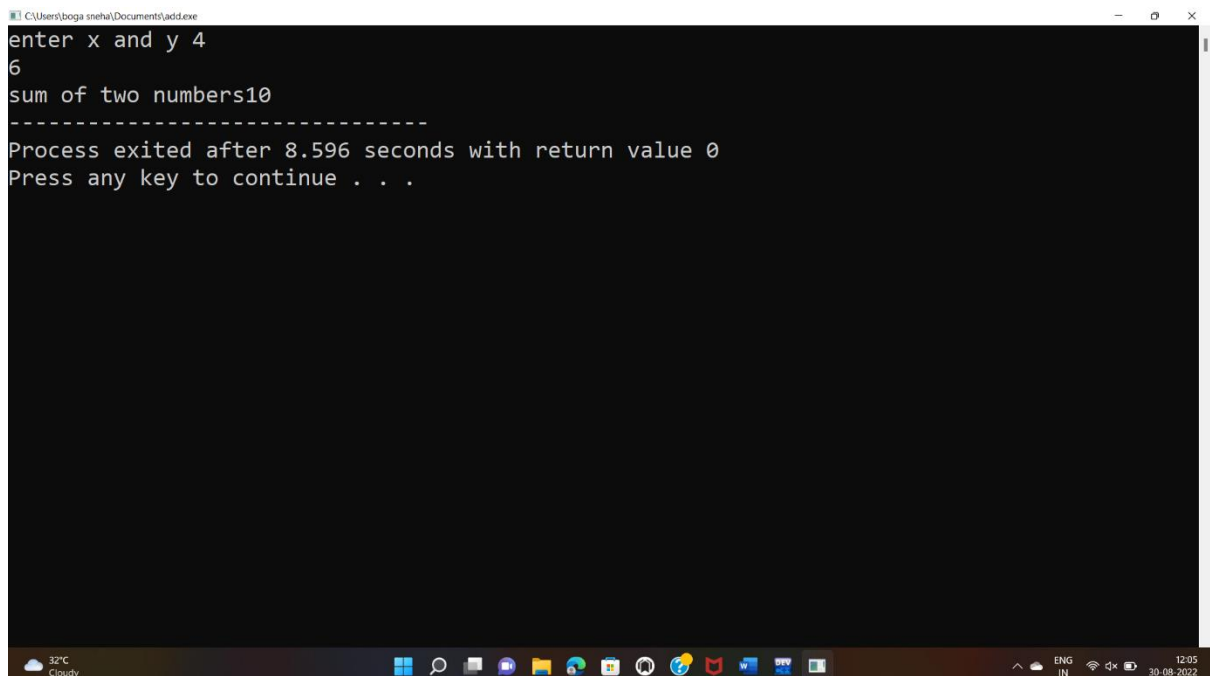
cout<<"enter x and y ";

```

        cin>>x>>y;
    }
    void add::display()
    {
        cout<<"sum of two numbers";
        z=x+y;
        cout<<z;
    }
    int main()
    {
        add a;
        a.getdata();
        a.display();
        return 0;
    }

```

OUTPUT:



The screenshot shows a terminal window with the following output:

```

C:\Users\boga sneha\Documents\add.exe
enter x and y 4
6
sum of two numbers10
-----
Process exited after 8.596 seconds with return value 0
Press any key to continue . . .

```

The terminal window has a title bar with standard Windows window controls. The taskbar at the bottom shows the system clock as 12:05 on 30-08-2022, along with various system icons and application icons.

3)Write a c++ program to find the volume of a cone using class and object.

```
using namespace std;
#include<iostream>
class volume
{
    int r,h,z;
public:
    void getdata();
    void display();
};
void volume::getdata()
{
    cout<<"enter r and h ";
    cin>>r>>h;
}
void volume::display()
{
    cout<<"volume of cone";
    z=0.3*3.14*r*r*h;
    cout<<z;
}
int main()
{
    volume a;
    a.getdata();
    a.display();
    return 0;
}
```

OUTPUT:

```
C:\Users\boga sneha\Documents\volume.exe
enter r and h 6
9
volume of cone305
-----
Process exited after 5.483 seconds with return value 0
Press any key to continue . . .
```

3) Write a c++ program to calculate the simple interest and compound interest using class and object.

```
using namespace std;
#include<iostream>
#include<math.h>
class interest
{
    int p,n,r,z,x;
public:
    void getdata();
    void display();
};
void interest::getdata()
{
    cout<<"enter p,n and r";
    cin>>p>>n>>r;
}
void interest::display()
```

```

{
    cout<<"simple interest";
    z=(p*n*r)/100;
    cout<<z;

    cout<<"compound interest";
    x=p*(pow((1+r/100),n));
    cout<<x;
}

int main()
{
    interest a;

    a.getdata();
    a.display();

    return 0;
}

```

OUTPUT:

The screenshot shows a Windows command prompt window titled "C:\Users\boga sneha\Documents\simpleinterest.exe". The user has entered "p,n and r 2000" and the program has calculated and displayed the results for both simple and compound interest. The output shows "simple interest160" and "compound interest2000". The window also displays the process exit message and a prompt to press any key to continue.

```

C:\Users\boga sneha\Documents\simpleinterest.exe
enter p,n and r 2000
4
2
simple interest160compound interest2000
-----
Process exited after 120.9 seconds with return value 0
Press any key to continue . . .

```