ASSIGNMENT 2

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```
//1st programme
#include<stdio.h>
#include<conio.h>
#include<iostream>
using namespace std;
inline double circle_area(float rad);
inline double circle_area(float rad)
  {
    return 3.14*rad*rad;
  int main()
```

```
\left\{ \right.
  double area;
  float radius;
  cout << " enter a radius of a circle ";
  cin >> radius;
  area=circle_area(radius);
  cout << endl << area;
  getch();
       return 0;
```

```
//2<sup>nd</sup> programme
#include<stdio.h>
#include<conio.h>
#include<iostream>
using namespace std;
//float cube(float);
float cube(float num)
  {
    return num*num*num;
  int main()
    {
       float number, answer;
       cout << "enter a number " << endl;</pre>
       cin >> number;
       cout << endl;
```

```
answer=cube(number);
cout << answer << endl;
getch();
return 0;
}</pre>
```

```
//3<sup>rd</sup> programme
#include<iostream>
#include<stdio.h>
#include<conio.h>
using namespace std;
void power(int,int y=2);
void power_(int,int p=3);
    void power(int x,int y)
         int answer=1,i;
         //cout << x;
    for(i=1;i<=y;i++)
       answer=answer*x;
```

```
}
cout << answer;</pre>
  void power_(int a,int p)
       int answer=1,i;
         for(i=1;i<=p;i++)
            answer=answer*a;
          cout << answer << endl;</pre>
     int main()
```

```
\Big\{
                int option,x;
                cout << "1. square 2. cube ";</pre>
                cin >> option;
                        switch(option)
                        case 1:
                           cout << "\n enter a value</pre>
of x ";
                           cin >> x;
                           power(x);
                           break;
                        case 2:
                         // cout << "we are here";</pre>
                           cout << "\n enter a value</pre>
of x ";
```

```
cin >> x;
    power_(x);
    break;
case 3:
    cout << "invalid option ";
    break;
}
return 0;
}</pre>
```

```
1. square 2. cube 1
enter a value of x 2
4.
```

```
//4<sup>th</sup> programme
#include<stdio.h>
#include<conio.h>
#include<iostream>
using namespace std;
    float simple_int(int year,float amount,float
rate=8.5);
    float simple_int(int year,float amount,float
rate)
         {
           float interst;
           // interst=year*rate*amount/100;
              return (year*rate*amount)/100;
         int main()
```

```
int year;
              float amount, interst;
              cout << "enter a number of year "
<< endl;
                cin >> year;
              cout << "enter an amount " <<
endl;
                cin >> amount;
interst=simple_int(year,amount);
                cout << "simple interst is " <<</pre>
interst << endl;
                getch();
                   return 0;
```

```
enter a number of year

4
enter an amount
5000
simple interst is 1700
```

```
//5<sup>th</sup> programme
#include<iostream>
#include<conio.h>
using namespace std;
void sum(int,int);
void sum(float,float);
void sum(double,double);
    void sum(int num1,int num2)
       {
         cout << num1+num2 << endl;</pre>
       void sum(float num1,float num2)
           cout << num1+num2 << endl;</pre>
```

```
}
         void sum(double num1,double num2)
         {
           cout << num1+num2 << endl;</pre>
         int main()
           {
              int number1, number2, option;
              float n1,n2;
              double a,b;
              cout << "1. integer sum 2. float
sum 3. double sum " << endl;
              do{
              cout << "enter your option " <<</pre>
endl;
              cin >> option;
```

```
switch(option)
                    case 1:
                      cout << "enter values " <<
endl;
                      cin >> number1 >>
number2;
                      sum(number1,number2);
                      break;
                    case 2:
                      cout << "enter values" <<
endl;
                      cin >> n1 >> n2;
                      sum(n1,n2);
                      break;
                    case 3:
```

```
cout << "enter values " <<
endl;
                        cin >> a >> b;
                        sum(a,b);
                         break;
                      case 4:
                        cout << "invalid option "</pre>
<< endl;
                         break;
               }while(option!=4);
              getch();
                      return 0;
            }
```

```
1. integer sum 2. float sum 3. double sum
enter your option
1
enter values
22
33
55
enter your option
4
invalid option
```

```
//6<sup>th</sup> programme
#include<iostream>
#include<conio.h>
using namespace std;
void area_circle(int);
void area_triangle(int,int);
void area_squre(int);
void area_rectangle(int,int);
       void area_circle(int rad)
          {
            cout << "area of a circle is " <<
3.14*rad*rad;
        void area_triangle(int hgt,int base)
             \left\{ \right.
```

```
cout << "area of a triangle is " <<
.5*hgt*base;
       void area_squre(int lgh)
         {
            cout << "area of a squre is " <<
lgh*lgh;
       void area_rectangle(int lgh,int hgt)
         {
            cout << "area of a rectangle is " <<
lgh*hgt;
```

```
int main()
            {
               int rad, hgt, lgh, base;
                 int option;
          do
            cout << " 1.circle 2.rectangle
3.square 4.triangle \n ";
                 cout << "enter your option \n";</pre>
                 cin >> option;
            switch(option)
               case 1:
                 cout << "enter the radius of the
circle \n";
                 cin >> rad;
```

```
area_circle(rad);
                 break;
              case 2:
                 cout << "enter length and height
of a rectangle \n ";
                cin >> hgt >> lgh;
                area_rectangle(hgt,lgh);
                 break;
              case 3:
                 cout << "enter length of a
square \n";
                cin >> lgh;
                 area_squre(lgh);
                 break;
              case 4:
                 cout << " enter height and base</pre>
of a triangle \n";
```

```
cin >> base >> hgt;
                         area_triangle(base,hgt);
                         break;
                     case 5:
                         cout << "\n invalid option ";</pre>
                         break;
                     }
              }while(option!=5);
               getch();
                                return 0;
1.circle 2.rectangle 3.square 4.triangle
enter your option
enter the radius of the circle
area of a circle is 1519.76
1.circle 2.rectangle 3.square 4.triangle
enter your option
invalid option _
```

```
//7<sup>th</sup> programme
#include<iostream>
#include<stdlib.h>
#include<conio.h>
#include<iomanip>
using namespace std;
  class info{
  int weight;
  int age;
  char name[20];
  public:
    void getdata()
       {
         cout << "enter your name ";</pre>
            cin >> name;
```

```
cout << "enter an age ";
            cin >> age;
          cout << "enter weight ";</pre>
            cin >> weight;
       }
       void showdata()
          {
            cout.width(10); cout << left << name</pre>
<< "|";
            cout.width(5);cout << right << age</pre>
<< "|";
            cout.width(5); cout <<right <<</pre>
weight << "|"<< endl;
```

```
};
int main()
{
     info i[3];
     int j;
     for(j=0;j<3;j++)
       i[j].getdata();
     }
     for(j=0;j<3;j++)
     {
        // cout<<j+1<<".\t";
       i[j].showdata();
```

```
// system("color fc");
   getch();
   return 0;
}
```

```
enter your name mohit
enter an age 20
enter weight 60
enter your name parth
enter an age 20
enter weight 70
enter your name chand
enter an age 20
enter weight 100
mohit
              20
                    60
              20
parth
                    70
              20
chand
                   100
```