



1. Write a c++ program to find the volume and surface area of sphere.

Hint: $\pi=3.14$

$\text{volume} = \frac{4.0}{3} * \pi * r * r * r;$

$\text{area} = 4 * \pi * r * r;$

answer:

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
{
    float r;
    float surface_area, volume;
    const float PI = 3.14;
    cout << "Enter radius of the sphere : ";
    cin >> r;
    surface_area = 4 * PI * r * r;
    volume = (4.0/3) * PI * r * r * r;
    cout << "Surface area of sphere is:" << surface_area;
    cout << "\nVolume of sphere is : " << volume;
    return 0;
}
```

2. Write a program that calculate Kelvin and Fahrenheit from a Celsius degree entered by the user. $k = c + 273$ $f = c * 5/9 + 32$

Answer

```
#include <iostream>
using namespace std;
int main()
{ int k,c;
  float f;
  cout << "Please Enter a Celsius Degree: ";
  cin >> c;
  k = c + 273;
  f = c * 5/9 + 32;
  cout << "Kelven: " << k << '\n';
  cout << "Fehrenhit: " << f << '\n';
  return 0;
}
```

3. What is the output of:

a) #include <iostream>
using namespace std;
int main()

```
{  
cout << 6 % 8 << endl  
<< 7 % 8 << endl  
<< 8 % 8 << endl  
<< 9 % 8 << endl  
<< 10 % 8 << endl;  
return 0;  
}
```

Answer:

6
7
0
1
2

////////////////////////////////////

b) cout << 3 / 2 + 5.5;

Answer:

6.5