

## Logic Building Assignment : 7

### Calculate Time Complexity of each program.

1. Write a program which accept radius of circle from user and calculate its area.  
Consider value of PI as 3.14. (Area =  $\text{PI} * \text{Radius} * \text{Radius}$ )

Input : 5.3  
Output : 88.2026

Input : 10.4  
Output : 339.6224

```
#include<stdio.h>

double CircleArea(float fRadius)
{
    // Logic
}

int main()
{
    float fValue = 0.0;
    double dRet = 0.0;

    printf("Enter radius");
    scanf("%f",&fValue);

    dRet = CircleArea(fValue);

    printf("_____");

    return 0;
}
```

2. Write a program which accept width & height of rectangle from user and calculate its area. (Area = Width \* Height)

Input : 5.3 9.78  
Output : 51.834

```
#include<stdio.h>

double RectArea(float fWidth, float fHeight)
{
    // Logic
}
```

```
}  
  
int main()  
{  
    float fValue1 = 0.0, fValue2 = 0.0;  
    double dRet = 0.0;  
  
    printf("Enter width");  
    scanf("%f",&fValue1);  
  
    printf("Enter height");  
    scanf("%f",&fValue2);  
  
    dRet = RectArea(fValue1, fValue2);  
  
    printf("_____");  
  
    return 0;  
}
```

3. Write a program which accept distance in kilometre and convert it into meter. (1 kilometre = 1000 Meter)

Input : 5  
Output : 5000

Input : 12  
Output : 12000

```
#include<stdio.h>
```

```
int KMtoMeter(int iNo)  
{  
    // Logic  
}
```

```
int main()  
{  
    int iValue = 0, iRet = 0;  
  
    printf("Enter distance");  
    scanf("%d",&iValue1);  
  
    iRet = KMtoMeter(iValue);  
  
    printf("_____");  
}
```

```
    return 0;  
}
```

4. Write a program which accept temperature in Fahrenheit and convert it into celsius. (1 celsius = (Fahrenheit -32) \* (5/9))

Input : 10  
Output : -12.2222 (10 - 32) \* (5/9)

Input : 34  
Output : 1.11111 (34 - 32) \* (5/9)

```
#include<stdio.h>
```

```
double FhtoCs(float fTemp)  
{  
    // Logic  
}
```

```
int main()  
{  
    float fValue = 0.0;  
    double dRet = 0.0;  
  
    printf("Enter temperature in Fahrenheit");  
    scanf("%d",&fValue1);  
  
    dRet = FhtoCs(fValue);  
  
    printf("_____");  
  
    return 0;  
}
```

5. Write a program which accept area in square feet and convert it into square meter. (1 square feet = 0.0929 Square meter)

Input : 5  
Output : 0.464515

Input : 7  
Output : 0.650321

```
#include<stdio.h>
```

```
double SquareMeter(int iValue)
```

```
{  
    // Logic  
}  
  
int main()  
{  
    int iValue = 0;  
    double dRet = 0.0;  
  
    printf("Enter area in square feet");  
    scanf("%d",&iValue);  
  
    dRet = SquareMeter(iValue);  
  
    printf("_____");  
  
    return 0;  
}
```

