1. Write a program to display the size of the different data type like char, int & float.

Answer -

**Input -**

```
#include <stdio.h>

void main()

{

    int a;

    float b;

    char ch;

    printf("SIZE OF INTEGER: %d",  sizeof(a));

    printf("\nSIZE OF FLOAT: %d", sizeof(b));

    printf("\nSIZE OF CHAR: %d", sizeof(ch));


}
```

**Output -**

SIZE OF INTEGER: 4

SIZE OF FLOAT: 4

SIZE OF CHAR: 1

2. Write a program to accept marks of three subject & find there average.

Answer -

**Input -**

```
#include<stdio.h>

//find the average of three marks//

int main()

{

  int x, y, z;

    float avg;
```

```
  printf("Enter Three Numbers : \n");

  scanf("%d %d %d",&x, &y, &z);


  avg=(x+y+z)/3.0;

  printf("Average of Three Numbers is : %f",avg);

}
```

**OUTPUT -**

Enter Three Numbers :

1

2

3

Average of Three Numebers is : 2.000000


3. Write a program to calculate the area of the circle, taking radius as input from the user.


Answer -

**INPUT -**

```
#include<stdio.h>

int main() {

//find the area of circle//

int x;

printf("Type the radius of the Circle- ");

scanf("%d", &x);


float area;

area =3.14 * x;

printf("The area of the circle is %f", area);

   return 0;

}
```

**OUTPUT-**

Type the radius of the Circle- 23

The area of the circle is 72.220001


4. Write a program to find the volume of the sphere, taking radius as input from keyboard.


Answer -

**INPUT -**

#include<stdio.h>

int main() {

//find the volume of sphere//

int x;

printf("Type the radius of the sphere- ");

scanf("%d", &x);


float volume;

volume = 4.1866 * x * x * x;

printf("The area of the sphere is %f", volume);

   return 0;

}

**OUTPUT -**

Type the radius of the sphere- 123

The area of the sphere is 7790706.000000

5. Write a program to calculate the simple interest taking P,R,T as input from keyboard.

Answer -

**INPUT -**

```
#include<stdio.h>
int main() {
//find the simple interest//
int x;
printf("Type the principle- ");
scanf("%d", &x);

int y;
printf("Type the rate of interest- ");
scanf("%d", &y);

int z;
printf("Type the time- ");
scanf("%d", &z);

float value;
value = x*y*z*0.01;
printf("The simple interest is %f", value);
    return 0;
}
```

**OUTPUT-**

Type the principle- 23

Type the rate of interest- 34

Type the time- 12

The simple interest is 93.839996

6. Write a program to covert kilometer to meter, taking kilometer as input.

Answer –

**INPUT-**

```
#include<stdio.h>
int main() {
//convert kilometer to meter//
int x;
printf("Type the value in km- ");
scanf("%d", &x);

float m;
m = x * 0.01;
printf("The value in metre is %f", m);
    return 0;
}
```

**OUTPUT -**

Type the value in km- 235

The value in metre is 2.350000

7. Write a program to covert meter to kilometer, taking meter as input.

Answer -
**INPUT -**

```c
#include<stdio.h>

//metre to km

int main()
{
    int kilometre, meter, rem;
    printf("Enter the meters\n");
    scanf("%d", &meter);

    kilometre = (meter / 1000);
    rem = meter%1000;
    printf("The length in Kilometres is %d Kilometres and %d meters", kilometre, rem);

    return 0;
}
```

**OUTPUT -**

Enter the meters

2314

The length in Kilometres is 2 Kilometres and 314 meters

8. Write a program to swap two intergers using third variable.

Answer -

**INPUT -**

```c
//Swap 2 integers using third variable
#include<stdio.h>
void main(){
    int a,b,c;
    printf("Enter the first number: ");
    scanf("%d",&a);
    printf("Enter the second number: ");
    scanf("%d",&b);
    c=a;
    a=b;
    b=c;
    printf("After Swapping first number: ");
    printf("%d",a);
    printf("\nAfter Swapping second number: ");
    printf("%d",b);
}
```

**OUTPUT -**

Enter the first number: 2

Enter the second number: 4

After Swapping first number: 4

After Swapping second number: 2

9. Write a program to swap two intergers without using third variable.


Answer -

**INPUT -**

//Swapping two numbers without using third variable

#include <stdio.h>

void main() {

  int a, b;

  printf("Enter a: ");

  scanf("%d", &a);

  printf("Enter b: ");

  scanf("%d", &b);

  a = a - b;

  b = a + b;

  a = b - a;

  printf("After swapping, a = %d\n", a);

  printf("After swapping,b=%d",b);

}

**OUTPUT -**

Enter a: 2

Enter b: 3

After swapping, a = 3

After swapping,b=2

10. Write a program to convert C to F.

Answer -

**INPUT -**

```c
//Convert Celsius to Farheneit
#include<stdio.h>
void main(){
    float c,result;
    printf("Enter temperature in celsius: ");
    scanf("%f",&c);
    result=((c*9)/5)+32;
    printf("The temperature in farheneit is : ");
    printf("%f",result);
}
```

**OUTPUT -**

Enter temperature in celsius: 45

The temperature in farheneit is : 113.000000

11. Write a program to perform all airthmatic operations over two integers.

Answer -

**INPUT -**

```
#include<stdio.h>
int main() {
//find the all the arithemetic operations using only 2 integer//
int x,y;
printf("Type the first integer - ");
scanf("%d", &x);


printf("Type the second integer - ");
scanf("%d", &y);


{float a;
a = x + y ;
printf("Addition - %f\n", a);}


{float b;
b = x - y ;
printf("Substraction - %f\n", b);}


{float c;
```

```c
c = x * y ;

printf("Multiplication - %f\n", c);}


{float d;

d = x/y ;

printf("Division - %f\n", d);}


{float e;

e = x%y ;

printf("Remainder - %f\n", e);}


    return 0;

}
```

**OUTPUT -**

Type the first integer - 4

Type the second integer - 5

Addition - 9.000000

Substraction - -1.000000

Multiplication - 20.000000

Division - 0.000000

Remainder - 4.000000