

## 1.Display multiple variable.

Sample variables:

a+c,x+c,dx+x,a+x,s+b,ax+b,s+c,ax+c,ax+ux

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

```
int main()
```

```
{
```

```
    int a=125,b=12345;
```

```
    long ax=1234567890;
```

```
    short s=4043;
```

```
    float x=2.13459;
```

```
    double dx=1.1415927;
```

```
    char c=w;
```

```
    unsigned long ux=2541567890;
```

```
    printf("a+b=%d",a+b);
```

```
    printf("\na+c=%d ==> letter will be converted into ASCII  
and sum with integer",a+c);
```

```
    printf("\nx+c=%f",x+c);
```

```
    printf("\ndx+x=%lf",dx+x);
```

```
    printf("\na+x=%f",a+x);
```

```
    printf("\ns+b=%i",s+b);
```

```
    printf("\nax+b=%li",ax+b);
```

```
    printf("\ns+c=%i",s+c,);
```

```
    printf("\nax+c=%li",ax+c);
```

```
    printf("\nax+ux=%li",ax+ux);
```

```
    return 0;
}
```

OUTPUT:

a+b=12470

a+c=212 ==> letter will be converted into ASCII and sum with integer

x+c=89.134590

dx+x=3.276183

a+x=127.134590

s+b=16388

ax+b=1234580235

s+c=4130

ax+c=1234567977

ax+ux=3776135780

2.Convert specified days into years,weeks and days .

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

```
int main()
```

```
{
```

```
    int days,years,weeks;
```

```
    printf("Enter days:");
```

```
    scanf("%d",&days);
```

```
    years=days/365;
```

```
    weeks=(days%365)/7;
```

```

        days=days-((years*365)+(weeks*7));
        printf("years=%d \n",years);
        printf("weeks=%d \n",weeks);
        printf("days=%d \n",days);

    return 0;

}

```

OUTPUT:

Enter days:1945

Years:5

Weeks:17

Days:1

3.Accept two items' weight(floating point values) and number of purchase(floating point values) and calculate the average value of the items.

```

#include<stdio.h>

float main()
{
    float w1,n1,w2,n2,result;
    printf("Enter weight item-1");
    scanf("%f",&w1);
    printf("No.of item 1:");
    scanf("%f",&n1);
    printf("Enter weight item-2");
    scanf("%f",&w2);
}

```

```

        printf("No. of item 2");
        scanf("%f",&n2);
        result=((w1*n1)+(w2*n2)/(n1+n2));
        printf("average value=%f\n",result);
    return 0;
}

```

OUTPUT:

Enter weight item 1:20

No. of items 1:5

Enter weight item 2:30

No. of items 2:6

Average value=25.454545

4.Create enumerated data type for 7days and display their values in integer constants.

```

#include<stdio.h>

int main()
{
    enum week{SUN,MON,TUE,WED,THU,FRI,SAT};
    printf("SUN=%d",SUN);
    printf("\n MON=%d",MON);
    printf("\n TUE=%d",TUE);
    printf("\n WED=%d",WED);
    printf("\n THU=%d",THU);
}

```

```
printf("\n FRI=%d",FRI);  
printf("\n SAT=%d",SAT);  
  
return 0;  
}
```

OUTPUT:

SUN=0

MON=1

TUE=2

WED=3

THU=4

FRI=5

SAT=6

5.Convert Centigrade to Farenheit.

```
#include<stdio.h>  
  
float main()  
{  
    float centigrade,fahrenheit;  
    printf("Enter temperature in centigrade:");  
    scanf("%f",&centigrade),  
    fahrenheit=(centigrade*9/5)+32;  
    printf("%f centigrade=%f fahrenheit",centigrade,fahrenheit);  
    return 0;  
}
```

OUTPUT:

Enter temperature in centigrade:36

36 centigrade=96.80 fahrenheit

6.Take minutes as input,and display the total number of hours and minutes.

```
#include<stdio.h>

int main()
{
    int m,n,m1;
    printf("Enter total minutes:");
    scanf("%d",&m);
    h=m/60;
    m1=(m-h*60);
    printf("h:%d,m:%d",h,m1);
    return 0;
}
```

OUTPUT:

Enter total minutes:442

h:7,m:22

7.Print the perimeter of a rectangle to take its height and width as input.

```
#include<stdio.h>

int main()
```

```

{
    int width;
    int height;
    int perimeter;
    printf("Enter the height of the rectangle:");
    scanf("%d",&height);
    printf("Enter the width of the rectangle:");
    scanf("%d",&width);
    perimeter=2*(height+width);
    printf("Perimeter of the rectangle is %d\n",perimeter);
return 0;
}

```

OUTPUT:

Enter the height of the rectangle:6

Enter the width of the rectangle:8

Perimeter of the rectangle:28

8.By using +,/,%>=,!= Operators.

```

#include<stdio.h>

int main()
{
    int a=9,b=6,c;
    c=a+b;
    printf("a+b=%d \n",c);
    c=a/b;
}

```

```

printf("a/b=%d \n",c);
c%=a;
printf("c=%d \n",c);
printf("%d>=%d is %d \n",a,b,a>=b);
c=(a!=b);
printf("%d!=%d is%d\n",c);
return 0;
}

```

OUTPUT:

a+b=15

a/b=1

c=1

9>=6 is 1

1!=1848723936 is 9

9.By using &,|,>>,?:,|| operators.

```

#include<stdio.h>
int main()
{
    int a=6,b=16,c=24,d,i;
    printf(" d=%d \n",a&b);
    printf("d=%d \n",a|b);
    For(i=0;i<=2;i++)
        printf("right shift by %d:%d \n",i,c>>i);
}

```



```

d=((a==6)?(5):(2);
printf("the value of 'd' variable is :%d \n ",d);
d=(a==b) || (c<b);
printf("(a==b) || (c<b)is %d \n",d);
return 0;
}

```

OUTPUT:

d=0

d=2

right shift by 0:24

right shift by 1:12

right shift by 2:6

the value of 'd' variable is:5

(a==b) || (c<b) is 0

10.Find the size of int,float,double and char.

```

#include<stdio.h>

int main()
{
    int int Type;
    float float Type;
    double double Type;
    char char Type;
    printf("Size of int:%zu bytes\n",size of(intType));
}

```

```
    printf("Size of float:%zu bytes\n",size of(floatType));  
    printf("Size of double:%zu bytes\n",size of(doubleType));  
    printf("Size of char:%zu bytes\n",size of(charType));  
return 0;  
}
```

OUTPUT:

Size of int: 4 bytes

Size of float:4 bytes

Size of double:8 bytes

Size of char:1 bytes