1. Display multiple variables. Sample Variables :
   a+ c, x + c,dx + x, a + x, s + b, ax + b, s + c, ax + c, ax + ux

```c
#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;

/*Sample Variables :
a+ c, x + c,dx + x, a + x, s + b, ax + b, s + c, ax + c, ax + ux*/

a+c;
printf("a+c=%d \n",a+c);

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

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

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

s + b;
printf("s+b=%d \n",s+b);

 ax + b;
 printf("ax+b=%f \n",ax+b);

s + c;
printf("s+c=%hd \n",s+c);

ax + c;
printf("ax+c=%f \n",ax+c);

ax + ux;
printf("ax+ux=%lu \n",ax+ux);

    return 0;
}
```

Output :-

a+c=212
x+c=89.134590
dx+x=3.276183
a+x=127.134590
s+b=16388
ax+b=127.134600
s+c=4130
ax+c=127.134600
ax+ux=3776135780

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

```c
#include <stdio.h>
int main()
{
    int days, years, weeks;
    days=1234;

    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:-

Years: 3

Weeks: 19

Days: 6

.3.Accepts two item’s weight (floating points' values) and number of purchase (floating points' values) and calculate the average value of the items.

```c
#include <stdio.h>
int main()
   {
    double weight1, purchase1, weight2, purchase2, result;
    printf("Weight of Item1: ");
    scanf("%lf", &weight1);
    printf("No. of item1: ");
    scanf("%lf", &purchase1);
    printf("Weight of Item2: ");
    scanf("%lf", &weight2);
    printf("No. of item2: ");
    scanf("%lf", &purchase2);
    result = ((weight1 * purchase1) + (weight2 * purchase2)) / (purchase1 + pu
rchase2);
    printf("Average Value = %f\n", result);
    return 0;
}
```

Output:-

Weight of Item1: 10

No. of item1: 5

Weight of Item2: 10

No. of item2: 5

Average Value = 10.000000

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

```c
#include<stdio.h>
int main()
{
    enum weeks{monday,tuesday,wednesday,thursday,friday,saturday,sunday};
    printf("monday=%d \n",monday);
    printf("tuesday=%d \n",tuesday);
    printf("wednesday=%d \n",wednesday);
    printf("thursday=%d \n",thursday);
    printf("friday=%d \n",friday);
    printf("saturday=%d \n",saturday);
    printf("sunday=%d \n",sunday);

return 0;
}
```

Output-

monday=0

tuesday=1

wednesday=2

thursday=3

friday=4

saturday=5

sunday=6

5. Converts Centigrade to Fahrenheit.

```c
#include<stdio.h>
 int main()
 {
 float fahrenheit, celsius;

  printf("enter celsius:");
  scanf("%f",&celsius);

 fahrenheit =( (celsius*9)/5)+32;
 printf("Temperature in fahrenheit is:  %f",fahrenheit);
  return 0;
    }
```

Output:-

enter celsius:36

Temperature in fahrenheit is: 96.800003

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

// sir am not able to solve this program

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

```c
#include<stdio.h>
int main()
{
    int height,width,perimeter;

    printf("enter the height of the rectangle\n");
    scanf("%d",&height);

    printf("enter the width of the recatangle\n");
    scanf("%d",&width);

    perimeter=2*(height+width);
    printf("perimeter of the rectangle is :%d",perimeter);

    return 0;
}
```

output:-

enter the height of the rectangle

10

enter the width of the recatangle

20

perimeter of the rectangle is :60

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

```c
#include<stdio.h>
int main()
{
    //( +, /, %=, >=, ! )

    int a=15,b=10,c;

   c=a+b;
    printf("%d \n",a+b);

   c=a/b;
    printf("%d \n",a/b);

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


    printf("%d\n",a>=b);


   printf("%d!=%d id %d",a,b,a!=b);




 return 0;
}
```

Output:-

25

1

c=1

1

15!=10 id 1

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

```c
#include<stdio.h>
int main()
{
    // ( &, |, >>, ?:, ||)

     int a = 5, b = 6, num=125,i;       // 5=0101  6=0110  125=1111101

    printf("%d\n", a&b);

    printf("%d\n", a|b);

     for (i=0; i<=5; ++i)
     printf("Right shift by %d: %d\n", i, num>>i);


      b = (a == 5) ? 5: 10;
   printf( "Value of b is %d\n", b );
      b = (a == 6) ? 5: 10;
   printf( "Value of b is %d\n", b );


    if ( a && b )
    {
      printf("true\n" );
   }
    return 0;


}
```

Output:-

4

7

Right shift by 0: 125

Right shift by 1: 62

Right shift by 2: 31

Right shift by 3: 15

Right shift by 4: 7

Right shift by 5: 3

Value of b is 5

Value of b is 10

true

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

```c
#include<stdio.h>
int main()
{
    int a;
    float b;
    char c;
    double d;

    printf("size of int=%lu bytes\n",sizeof(a));
    printf("size of float=%lu bytes\n",sizeof(b));
    printf("size of char=%lu bytes\n",sizeof(c));
     printf("size of double=%lu bytes\n",sizeof(d));

     return 0;
}
```

Output:-

size of int=4 bytes

size of float=4 bytes

size of char=1 bytes

size of double=8 bytes