1. Draw a flowchart to add two numbers entered by user.

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

int main()
{
  /* int a,b,sum;
   printf("enter the tow number\n");
   scanf("%d%d", &a,&b);
   sum=a+b;
   printf("the sum is%d", sum);*/


    return 0;

}
```

2. Calculate the area of a circle with given radius.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int r;
    float area;
    printf("enter the given radius\n");
    scanf("%d", &r);
    area=3.14*r*r;
    printf("the area is%f",area);

    return 0;
    }
```

3. Determine and Output Whether Number N is Even or Odd.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int n;

    printf("enter the number\n");
    scanf("%d", &n);
    if(n%2==0){
        printf("this number is even");
    }
    else
         printf("this number is odd");
    return 0;
    }
```

4. Determine Whether a Temperature is Below or Above the Freezing Point.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
   int c;
   printf(" Enter the temperature\n");
   scanf("%d", &c);

   if(c<=0){
    printf("The temperature is freezing");
   }
   else
    printf("temperature is greater than zero");
    return 0;
    }
```

5. Convert Temperature from Fahrenheit (℉) to Celsius (℃).

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int f,c;
    printf("Enter the temperature in Fahrenheit\n");
    scanf("%d", &f);
    c=(5*(f-32)/9);
    printf("in the Celsius is%d\n", c);
   return 0;
    }
```

6. Write an algorithm and draw a flowchart to convert the length in feet to centimeter.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int feet;
    float l;
    printf("enter the length in feet\n");
    scanf("%d", &feet);
    l=feet*30.48;
    printf("length in the centimeter%f",l);

   return 0;
    }
```

7. Write an algorithm and draw a flowchart to print the square of all numbers from 1 to10.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int i=1, sum;
    while(i<=10){
        sum=i*i;
        printf("%d\n",sum);
        i++;
    }

   return 0;
    }
```

8. Write an algorithm and draw a flowchart to print the SUM of numbers from LOW to HIGH. Test with LOW=3 and HIGH=9.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int i=3;
    while(i<=9){
        printf("%d\n",i);
        i++;
    }

   return 0;
    }10:56
```

9. Write an algorithm and draw a flowchart to print all numbers between LOW and HIGH that are divisible by NUMBER

```
#include <stdio.h>

int main()
{
    int low, high, number, temp;

    printf("Enter low: ");
    scanf("%d", &low);
    printf("Enter high: ");
    scanf("%d", &high);
    printf("Enter a number: ");
    scanf("%d", &number);
    printf("\n>>> ");
    if(low > high)
    {
        temp = low;
        low = high;
```

```
        high = temp;
    }

    for(int i = low; i<= high; i++)
    {
        if(i%number == 0)
        {
            printf("%d, ", i);
        }

    }
    printf("\n");
    return 0;
}
```

10. Draw a flowchart to find the largest of three numbers A, B, and C.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int a,b,c;
    printf("enter three nubers\n");
    scanf("%d%d%d", &a,&b,&c);
    if(a>b){
        if(a>c)
            printf("the largest number is:\n%d",a);
        else
            printf("the largest number is:\n%d",c);

    }
    else if(b>c)
    printf("the largest number is:\n%d",b);

   return 0;
    }
```

11. Draw a flowchart for a program that reads 10 numbers from the user and prints out their sum, and their product.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int n,i=1,sum=0;
    printf("enter on number\n");
    while(i<=10){
        scanf("%d", &n);
         sum=sum+n;
         i++;
    }
    printf("the sum is:%d \n",sum);
```

```
   return 0;
```

12. Write an algorithm and draw a flowchart to count and print all numbers from LOW to HIGH by steps of STEP. Test with LOW=0 and HIGH=100 and STEP=5.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int i=5,s=0;
    while(i<=100){
        printf("%d\n",i);
        i=i+5;
        s++;
    }
    printf("\n The number of values is:\n %d",s);

   return 0;
    }
```

13. Write an algorithm and draw a flowchart to print the multiplication table for 6's.

```
int main()
{
    int i=1,sum=0;
    while(i<=10){
        sum=6*i;
        printf("%d \n",sum);
        i++;
    }

    return 0;
}
```

14. Draw a flowchart for computing factorial N (N!).

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    int n,m=1,sum=1;
    printf("Enter the number you want to make it my factor...\n");
    scanf("%d", &n);
    while(m<=n){
        sum=sum*m;
        m++;
    }
    printf("the factor number is:%d\n",sum);
```

```
   return 0;
    }
```

15. Draw a flow chart to print all natural numbers in reverse (from n to 1).

```
#include <stdio.h>
#include <stdlib.h>
int main(){
   int n;
   printf("enter the number");
   scanf("%d", &n);
   while(n>0){

    printf("%d\n",n);
    n=n-1;
   }
   return 0;
    }
```

16. Design an algorithm which generates even numbers between 1000 and 2000 and then prints them in the standard output. It should also print total sum.

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

int main()
{
    int sum=0;
    for(int i=1000; i<=2000; i+=2)
    {
        printf("%d\n", i);
        sum=sum+i;

    }
    printf("\n\n");
    printf("the sum value is:\t%d", sum);
    return 0;
}
```

17. Design an algorithm with a natural number, n, as its input which calculates the following formula and writes the result in the standard output: S = ½ + ¼ + … +1/n

```
#include <stdio.h>
#include <stdlib.h>
int main(){
    float n,sum=0,m=2;
    printf("enter the n number\n");
    scanf("%f", &n);
        while(m<=n){
        sum=sum+1/m;
```

```
        m=m*2;
    }

    printf("the sum is:\n%f",sum);

   return 0;
    }
```

18. Design an algorithm to convert a decimal number, n, to binary format?

```
#include <stdio.h>
#include <stdlib.h>
int main(){
   int n,s; //s: bölümün kalanıdır
   printf("enter the number\n");
   scanf("%d", &n);
   while(n>0){
    s=n%2;
    n=n/2;
    printf("%d",s);
   }
   return 0;
    }
```

19. Draw a flow chart to print multiplication table of any number.

```
#include <stdio.h>
#include <stdlib.h>
int main(){
  int n,sum,i=1;
  printf("Enter the number whose multiplication table you want to find\n");
  scanf("%d", &n);
  while(i<=10){
    sum=n*i;
    i++;
    printf("_%d",sum);
  }

   return 0;
    }
```

20. Draw a flow chart to count number of digits in a number

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int n,i=0; //n:input from the user| i:digit counter
    printf("Enter the number whose digits you want to calculate\n");
```

```
   scanf("%d", &n);
  while(n>0)
  {
    n=n/10;
    i++;
  }
    printf("The number of digits of this number are:\n%d",i);
    return 0;
}
```

21. Draw a flow chart to find first and last digit of a number.

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int n,f,l;
    printf("enter the number whose want to find first and last digit\n");
    scanf("%d", &n);
    l=n%10;
    while(n>0){
        f=n;
        n=n/10;
    }
    printf("the first number is:\t%d",f);
    printf("\nthe last number is:\t%d",l);

    return 0;
}
```

22. Draw a flow chart to swap first and last digits of a number.

```
#include <stdio.h>
#include <math.h>
int main()
{
    int n,firstDigit, lastDigit,digits, swappedNum;
    printf("Enter number = ");
    scanf("%d", &n);
    //Find last digit of a number
    lastDigit = n % 10;
    //Find total number of digits - 1
    digits = (int)log10(n);
    //Find first digit
    firstDigit = (int) (n / pow(10, digits));
    swappedNum = lastDigit;
    swappedNum *= (int) round(pow(10, digits));
    swappedNum += n % ((int)round(pow(10, digits)));
    swappedNum -= lastDigit;
    swappedNum += firstDigit;
```

```
    printf("Number after swapping first and last digit: %d", swappedNum);
    return 0;
}
```

23. Draw a flow chart to check whether a number is palindrome or not.

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int num ,sum=0 ,d; //d:value digits

    printf("enter the number\n");
    scanf("%d", &num);
    int t=num;

    while(num>0)
    {
        d=num%10;
        sum=sum*10+d;
        num=num/10;

    }
    if(sum==t)
    {
        printf("the number is palindrome\t%d\n",sum);
    }
    else
        printf("the number is not palindrome\t%d\n",sum);
    return 0;
}
```

24. Draw a flow chart to find frequency of each digit in a given integer.

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int number, temp, mod;
    printf("Enter number: ");
    scanf("%d", &number);
    int sayac;
    printf("\n");
    for(int i=0; i<=9; i++)
    {
        sayac = 0;
        temp = number;
        while(temp > 0)
        {
```

```
            mod = temp%10;
            if(mod == i) sayac++;
            temp /= 10;
        }
        if(sayac != 0) printf("\t%d repeat for %d times.\n", i, sayac);
    }

    return 0;
}
```

25. Draw a flow chart to find HCF (Highest Common Factor) of two numbers.

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int a,b,k; //k:remainder of the division
                //a,b:input
    printf("enter tow number to find HCF\n");
    scanf("%d", &a);
    scanf("%d", &b);

    if(a>b)
    {
        k=a%b;
    }
    else
        k=b%a;

    printf("the highest common factor is:\t%d",k);

    return 0;
}
```