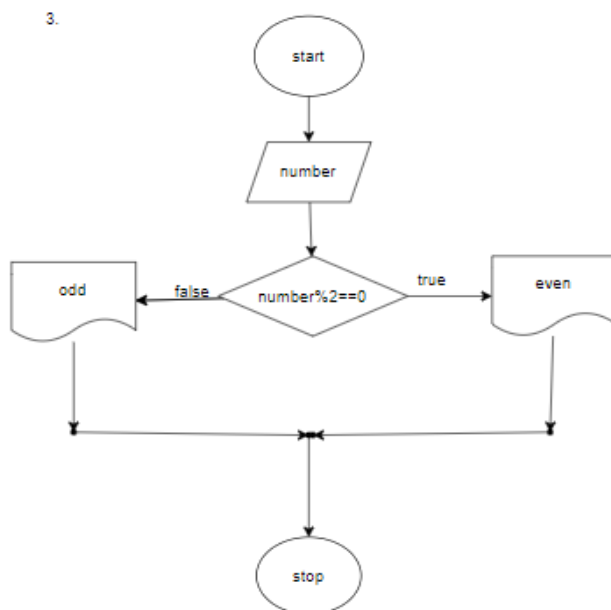1. Draw a flowchart to add two numbers entered by user.

1.

```
        start

         ↓

        a,b

         ↓

        a,'b

         ↓

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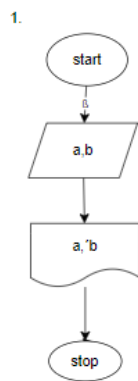
2. Calculate the area of a circle with given radius.

2.

```
        start

         ↓

          r

         ↓

    area=3,14*r^2

         ↓

        area

         ↓

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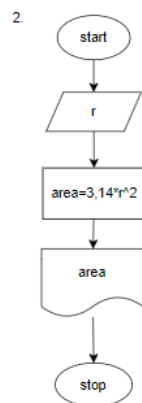
3. Determine and Output Whether Number N is Even or Odd.

3.

```
                start

                 ↓

               number

                 ↓

   odd  ←false←  number%2==0  →true→  even

    ↓                                   ↓
    └──────────────→ ←←──────────────────┘

                     ↓

                   stop
```

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

4

```
                    ( start )
                        |
                        v
                  "enter the
                  temperature"
                        |
                        v
                  / temperature /
                        |
                        v
              < temperature>=0 >
             /                  \
            v                    v
   "temperaure is        "temperature is
    below the             above the
    freeezing point"      freezing point"
            \                  /
             v                v
                ( stop )
```
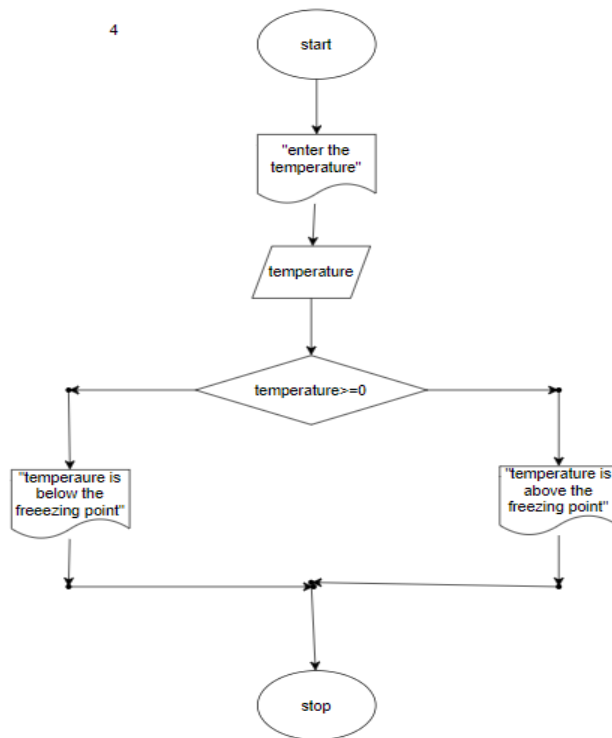
5. Convert Temperature from Fahrenheit (°F) to Celsius (°C

5.

```
                  ( start )
                      |
                      v
              "how many degrees
               fahrenheit is the
               temperature?"
                      |
                      v
                / fahrenheit /
                      |
                      v
         | celsius=5/9*(fahrenheit-32) |
                      |
                      v
             | celsius , "celsius" |
                      |
                      v
                  ( stop )
```
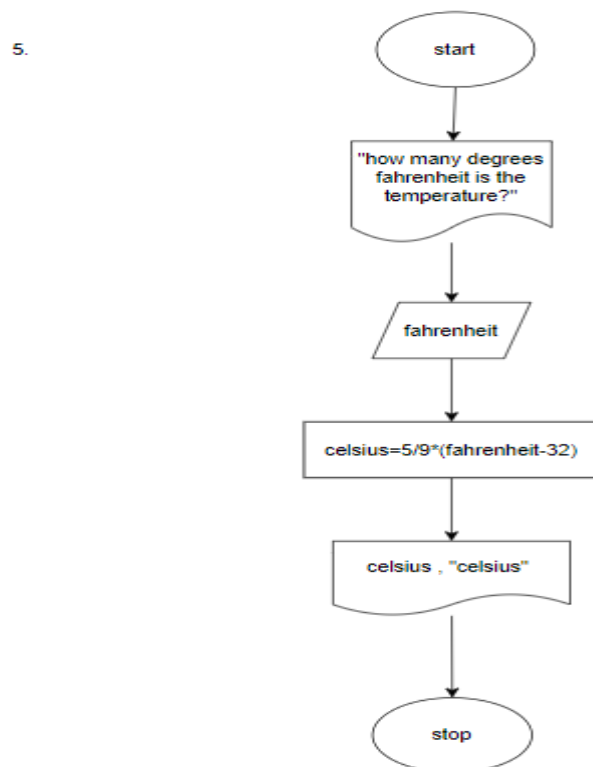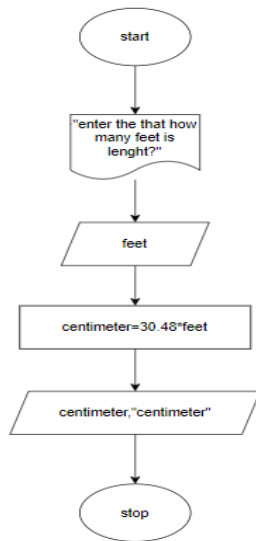
6.Write an algorithm and draw a flowchart to convert the length in feet to centimeter
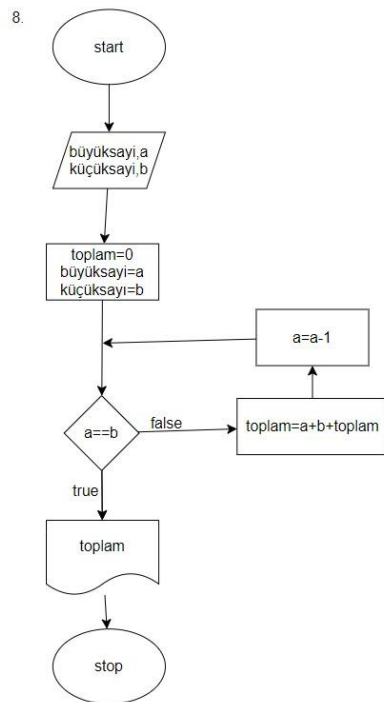
6.

```
        ( start )
            │
            ▼
   ┌──────────────────┐
   │"enter the that how│
   │  many feet is     │
   │   lenght?"        │
   └──────────────────┘
            │
            ▼
      ╱──────────╱
     ╱   feet   ╱
    ╱──────────╱
            │
            ▼
   ┌────────────────────────┐
   │ centimeter=30.48*feet  │
   └────────────────────────┘
            │
            ▼
   ╱─────────────────────────╱
  ╱ centimeter,"centimeter"  ╱
 ╱─────────────────────────╱
            │
            ▼
        ( stop )
```

7. Write an algorithm and draw a flowchart to print the square of all numbers from 1 to1

7.

```
        ( start )
            │
            ▼
       ┌────────┐
       │  i=1   │
       └────────┘
            │
            ▼
       ┌────────────┐
       │ sonuç=i^2  │◄──────────────┐
       └────────────┘               │
            │                       │
            ▼                       │ true
       ┌────────┐                   │
       │  ++i   │                   │
       └────────┘                   │
            │                       │
            ▼                       │
       ┌────────┐      ◇───────◇   │
       │ sonuç  │────► │ i<=10 │───┘
       └────────┘      ◇───────◇
                           │
                           │ false
                           ▼
                       ( stop )
```
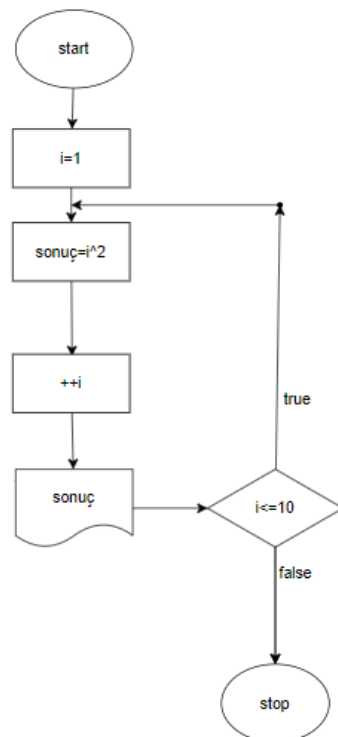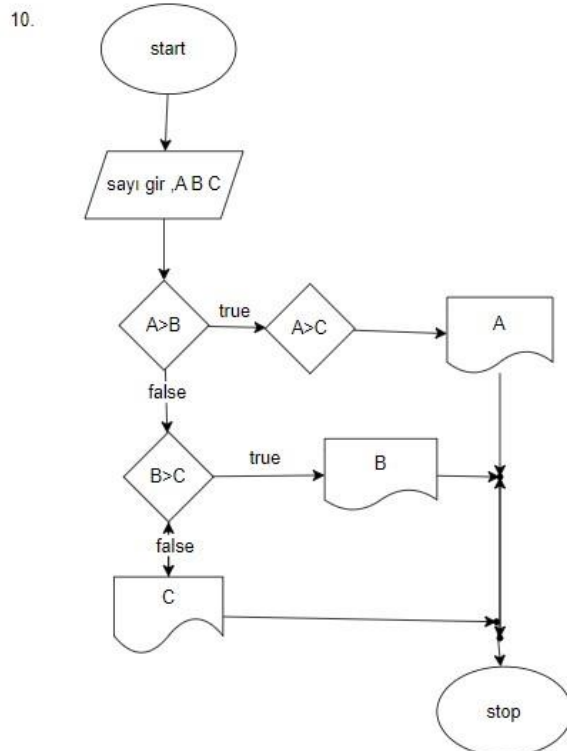
8. Write an algorithm and draw a flowchart to print the SUM of numbers from LOW to HIGH. Test with LOW=3 and HIGH=9.

8.

```
         start
           │
           ▼
     ┌─────────────┐
     / büyüksayi,a  /
     / küçüksayi,b  /
     └─────────────┘
           │
           ▼
     ┌─────────────┐
     │  toplam=0   │
     │ büyüksayi=a │
     │ küçüksayı=b │
     └─────────────┘                    ┌──────────┐
           │                            │  a=a-1   │
           ▼                            └──────────┘
                         false               ▲
         ◇ a==b ◇ ────────────► ┌──────────────────┐
           │                    │ toplam=a+b+toplam │
        true│                    └──────────────────┘
           ▼
     ┌─────────────┐
     │   toplam    │
     └─────────────┘
           │
           ▼
         stop
```
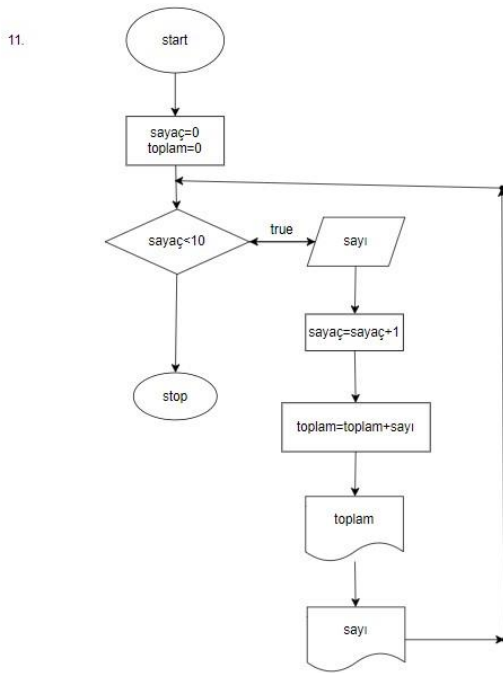
9.Write an algorithm and draw a flowchart to print all numbers between LOW and HIGH that are divisible by NUMBER.
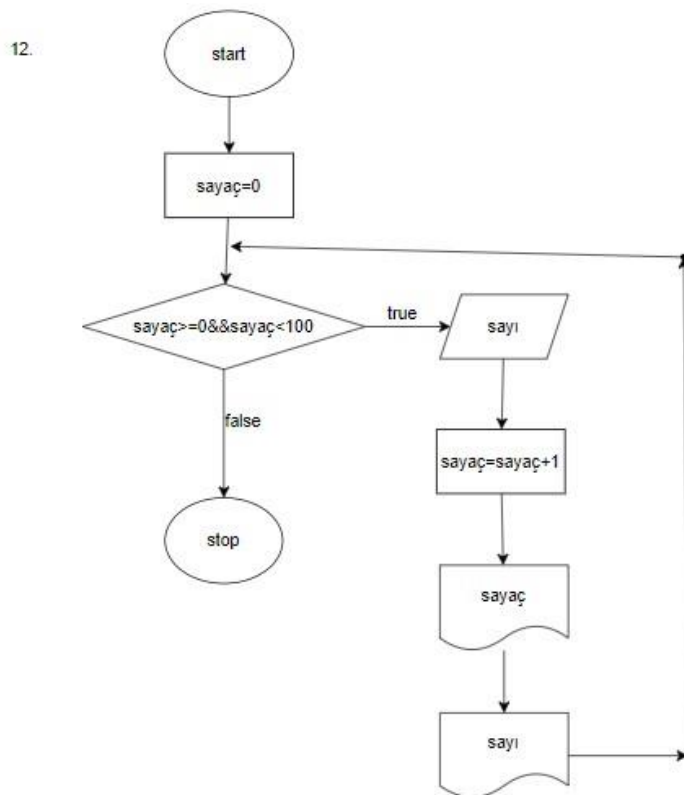
10.Draw a flowchart to find the largest of three numbers A, B, and C

10.

```
         start
           │
           ▼
     ┌──────────────┐
     / sayı gir ,A B C /
     └──────────────┘
           │
           ▼
              true
         ◇ A>B ◇ ──────► ◇ A>C ◇ ──────► ┌──────┐
           │                              │  A   │
       false│                             └──────┘
           ▼                                 │
              true        ┌──────┐           │
         ◇ B>C ◇ ───────► │  B   │ ───────►  │
           │              └──────┘           │
       false│                                │
           ▼                                 │
     ┌──────┐                                │
     │  C   │ ───────────────────────────►   │
     └──────┘                                ▼
                                           stop
```

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

11.

```
        start

      sayaç=0
      toplam=0

   sayaç<10  ──true──>  sayı

                        sayaç=sayaç+1

   stop

                    toplam=toplam+sayı

                        toplam

                        sayı
```
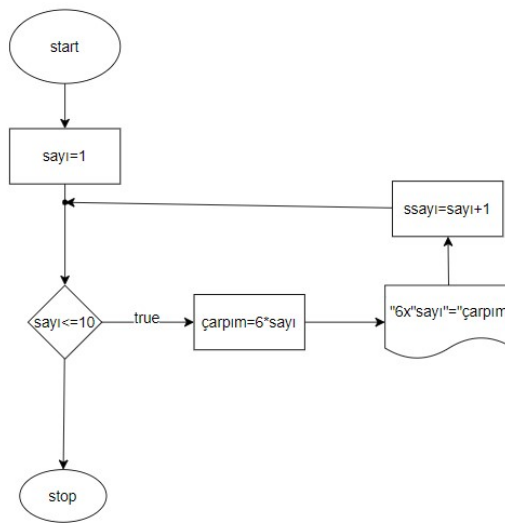

12.Write an algorithm and draw a flowchart to count and print all numbers from LOW to HIGH by steps of STEP. Test with LOW=0 and HIGH=100 and STEP=5
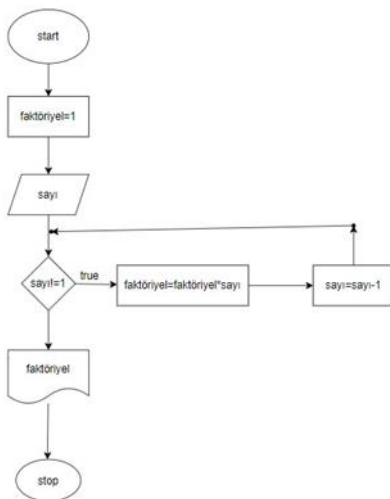
12.

```
        start

      sayaç=0

   sayaç>=0&&sayaç<100  ──true──>  sayı

         false                     sayaç=sayaç+1

        stop                       sayaç

                                   sayı
```

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

13.

```
        ┌─────────┐
        │  start  │
        └────┬────┘
             │
        ┌────▼────┐
        │ sayı=1  │
        └────┬────┘                    ┌──────────────┐
             │◄──────────────────────── │ ssayı=sayı+1 │
             │                          └──────▲───────┘
        ┌────▼─────┐                           │
        │ sayı<=10 │──true──┐  ┌────────────┐  ┌──────────────────┐
        └────┬─────┘        └─►│ çarpım=6*sayı│─►│ "6x"sayı"="çarpım │
             │                 └────────────┘  └──────────────────┘
        ┌────▼────┐
        │  stop   │
        └─────────┘
```

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

14.

```
        ┌─────────┐
        │  start  │
        └────┬────┘
        ┌────▼──────────┐
        │ faktöriyel=1  │
        └────┬──────────┘
        ┌────▼────┐
        │  sayı   │
        └────┬────┘
             │◄─────────────────────────────────┐
        ┌────▼────┐  true  ┌───────────────────────┐  ┌──────────────┐
        │ sayı!=1 │──────► │ faktöriyel=faktöriyel*sayı│─►│ sayı=sayı-1  │
        └────┬────┘        └───────────────────────┘  └──────────────┘
        ┌────▼──────────┐
        │  faktöriyel   │
        └────┬──────────┘
        ┌────▼────┐
        │  stop   │
        └─────────┘
```

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

15.

```
        ┌─────────┐
        │  start  │
        └────┬────┘
        ┌────▼────┐
        │  sayı   │
        └────┬────┘
             │◄──────────────────────────┐
        ┌────▼────┐  true  ┌──────────────┐  ┌────────┐
        │ sayı!=1 │──────► │ sayı=sayı-1  │─►│  sayı  │
        └────┬────┘        └──────────────┘  └────────┘
             │ false
        ┌────▼────┐
        │  stop   │
        └─────────┘
```
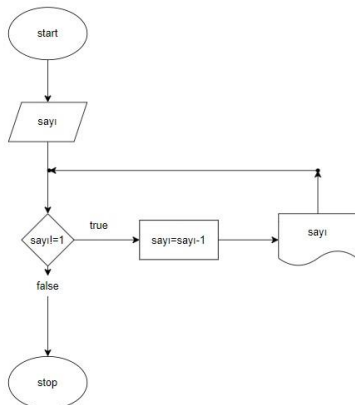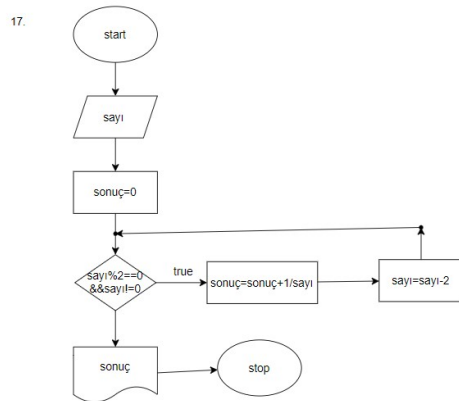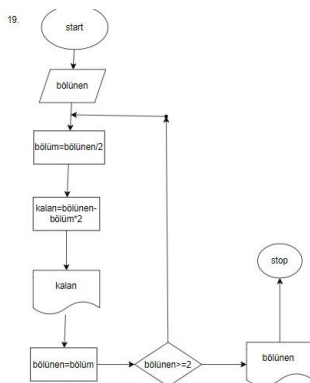
16.Design an algorithm which generates even numbers between 1000 and 2000 and then prints them in the standard output. It should also print total sum.
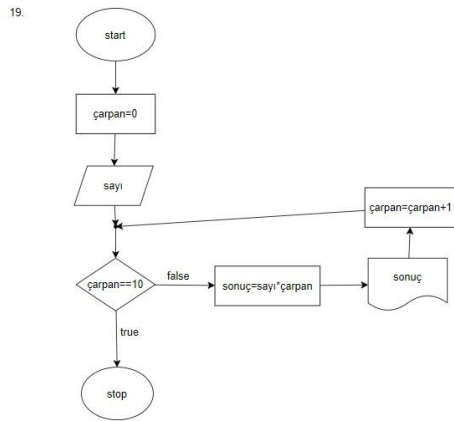
16.

```
        start
          │
          ▼
   ┌──────────────┐
   │ sayı=1000    │
   │ toplam=1000  │
   └──────────────┘
          │
          ▼
   ┌──────────────┐
   │     sayı     │
   └──────────────┘
          │
          ▼                                            ┌─────────────────────┐
   ◇ sayı<200 ◇ ──true──► [sayı=sayı+2] ──► [ sayı ] ──► toplam=toplam+sayı │
          │                                            └─────────────────────┘
          ▼
   ┌──────────────┐
   │    toplam    │
   └──────────────┘
          │
          ▼
        stop
```
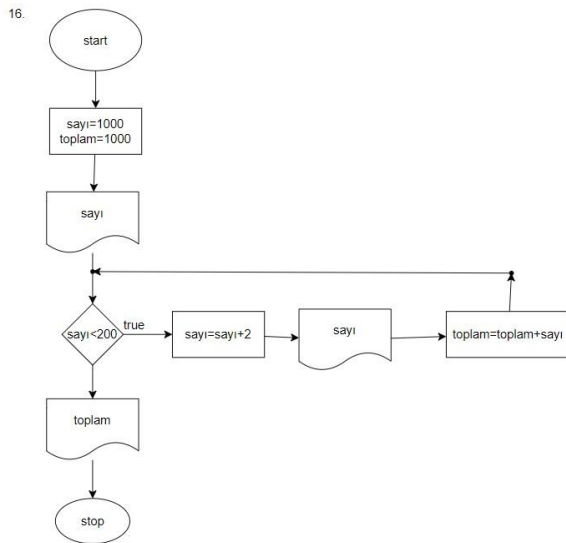
17.Design an algorithm with a natural number, n, as its input which calculates the following formula and writes the result in the standard output: S = ½ + ¼ + … +1/n.

17.

```
        start
          │
          ▼
        / sayı /
          │
          ▼
   ┌──────────────┐
   │   sonuç=0    │
   └──────────────┘
          │
          ▼
   ◇ sayı%2==0  ◇ ──true──► [sonuç=sonuç+1/sayı] ──► [sayı=sayı-2]
   ◇ &&sayı!=0  ◇
          │
          ▼
   ┌──────────────┐        ┌────────┐
   │    sonuç     │ ─────► │  stop  │
   └──────────────┘        └────────┘
```

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

19.

```
        start
          │
          ▼
       / bölünen /
          │
          ▼
   ┌──────────────┐
   │ bölüm=bölünen/2 │
   └──────────────┘
          │
          ▼
   ┌──────────────┐
   │ kalan=bölünen- │
   │    bölüm*2     │
   └──────────────┘
          │
          ▼
   ┌──────────────┐
   │    kalan     │                        stop
   └──────────────┘                          ▲
          │                                  │
          ▼                                  │
   [bölünen=bölüm] ──► ◇ bölünen>=2 ◇ ──► [ bölünen ]
```

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

19.

```
        start

      çarpan=0

        sayı
                              çarpan=çarpan+1

                    false
  çarpan==10  ─────────► sonuç=sayı*çarpan ──────►  sonuç

        true

        stop
```

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

20.

```
        start

      sayaç=0

        sayı

                    false
   sayı==0  ─────────► sayaç=sayaç+1 ──────► sayı=sayı/10

        true

      sayaç  ──────────►  stop
```
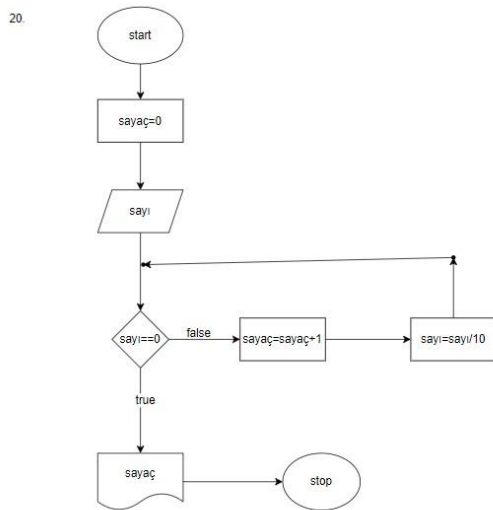
21.Draw a flow chart to find first and last digit of a number.

21.

```
start
  │
  ▼
 sayı
  │
  ▼
ilkbasamak=0
sonbasamak=0
  │
  ▼                                          sayı=sayı/10
  │◄──────────────────────────────────────────────┘
  │                false                           ▲
 sayı==0 ──────────► ilkbasamak=sayı%10 ──► sonbasamak=sayı%10
  │
 true
  │
  ▼
ilkbasamak
sonbasamak
  │
  ▼
 stop
```
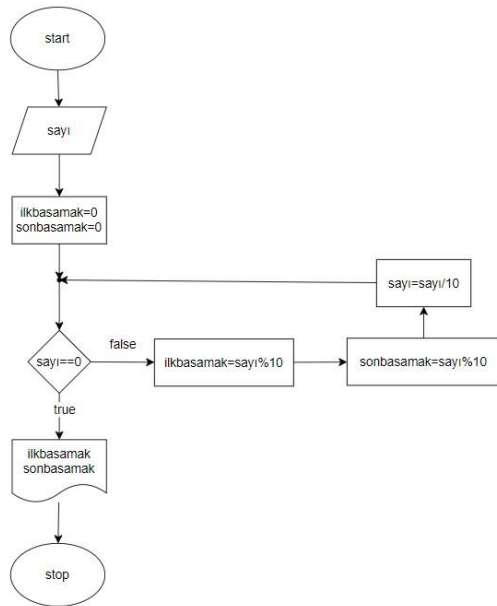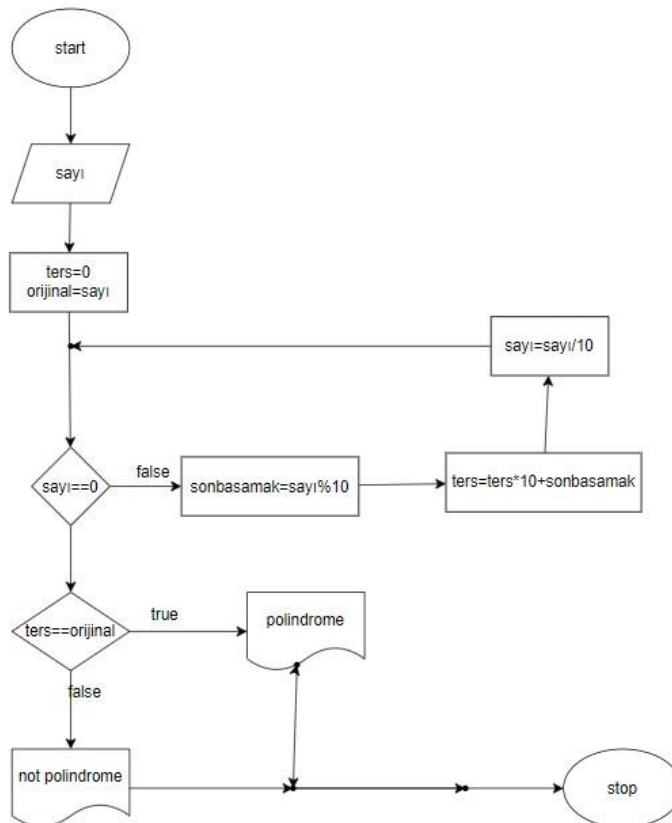
22. Draw a flow chart to swap first and last digits of a number

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

23.
```
start
  │
  ▼
 sayı
  │
  ▼
ters=0
orijinal=sayı
  │
  │                                            sayı=sayı/10
  │◄──────────────────────────────────────────────┘
  │              false                              ▲
 sayı==0 ──────────► sonbasamak=sayı%10 ──► ters=ters*10+sonbasamak
  │
  ▼
              true
 ters==orijinal ──────────► polindrome
  │
 false                              │
  │                                 │
  ▼                                 │
not polindrome ───────────────────►│──────► stop
```

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

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