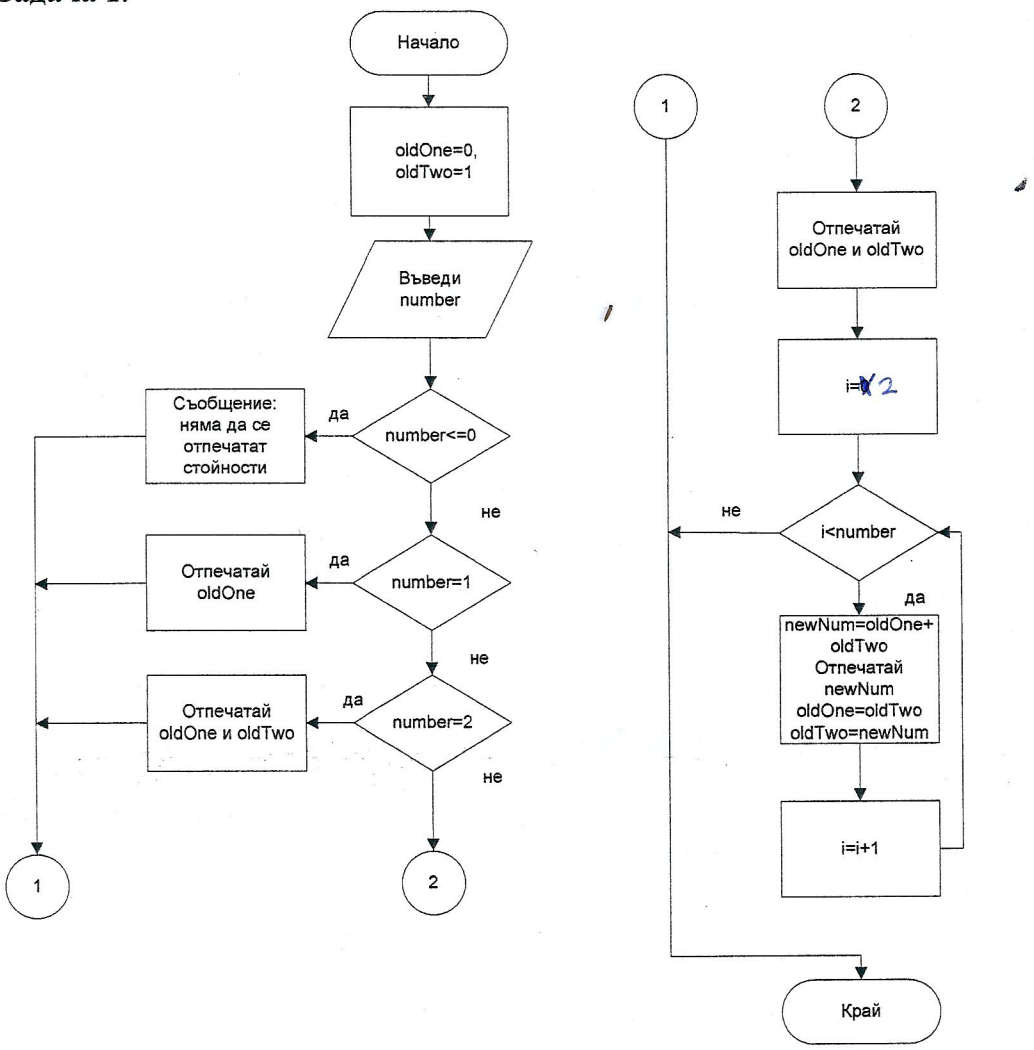
Задача 1.




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

int main(int argc, char *argv[])
{
  int i; //използва се при for
  int number; //за броя на стойностите, които ще се отпечатат
  int oldOne=0;
  int oldTwo=1;
  int newNum;

  printf("Programa za redicata na Fibonachi!\n");
  printf("Vuvedete broq stoinosti, koito da se otpechatat: ");
  scanf("%d", &number);

  if (number<=0)
    printf("No elements to print!\n");
  else if(number==1)
    printf("%d ", oldOne);
  else if(number==2)
    printf("%d %d", oldOne, oldTwo);
  else
  {
    printf("%d ", oldOne);
    printf("%d ", oldTwo);
    for(i=2; i<number; i++)
```

```
    {
      newNum=oldOne+oldTwo;
      printf("%d ", newNum);
      oldOne=oldTwo;
      oldTwo=newNum;
    }
  }
  system("PAUSE");
  return 0;
}
```

Задача 1.1: Ограничете стойността за брой на стойностите (0 <= number <= 20).

Задача 2.

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

int main(int argc, char *argv[])
{
 int i = 0, num = 1, fact;

      do
      {
       printf("\nPlease enter an integer number!\n");
       scanf("%d", &num);
       if (num<=0)
         printf ("It should be a positive number!\n");
      }while(num<=0);

      fact = 1;
      for(i = 1; i <= num; i++)
      {
       fact *= i;
      }
      printf("The factorial %d! is: %d\n", num, fact);


 system("PAUSE");
 return 0;
}
```

Задача 3.

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

int main(int argc, char *argv[])
{
   int number, i=1, fact=1;

   printf("\nPlease enter an integer number!\n");
   scanf("%d", &number);
   if (number<=0)
     printf ("It should be a positive number!\n");
```

```
  else
  {
   while (i<=number)
   {
      fact=fact*i;
      i++;
   }
   printf("The factorial %d! is: %d\n", number, fact);
  }
 system("PAUSE");
 return 0;
}
```

Задача 3. 1: Да се пренапише, но с използване на *do ... while*

Задача 4.

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

int main(int argc, char *argv[])
{
        int choice, number;
        int i=15, j=25, k;
        float f=23.658, b=0.00006;

        printf("Izberi:\n");
        printf("1. Proverka dali dadeno cqlo chislo e chetno ili
nechetno\n");
        printf("2. Rezultat ot izpylnenieto na (%%8.4f) za 23.658\n");
        printf("3. Rezultat ot izpylnenieto na k=(j==10) ? i : j \n");
        printf("4. Rezultat ot izpylnenieto na (%%14e) for b=0.00006\n");
        scanf("%d", &choice);

        switch (choice)
        {
           case 1:
              printf("Vyvedi cqlo chislo: ");
              scanf("%d", &number);
              if (number==0) printf("Nito chetno, nito nechetno\n");
              else if (number%2==0) printf("Chetno\n");
              else printf("Nechetno\n");
              break;
            case 2:
              printf("%8.4f\n", f);
              break;
            case 3:
              k=(j==10) ? i : j;
              printf("k=%d\n", k);
              break;
            case 4:
              printf("%14e\n", b);
              break;
            default:
              printf("Nevalidna operaciq\n");
        } // край на switch
  system("PAUSE");
  return 0;
}
```