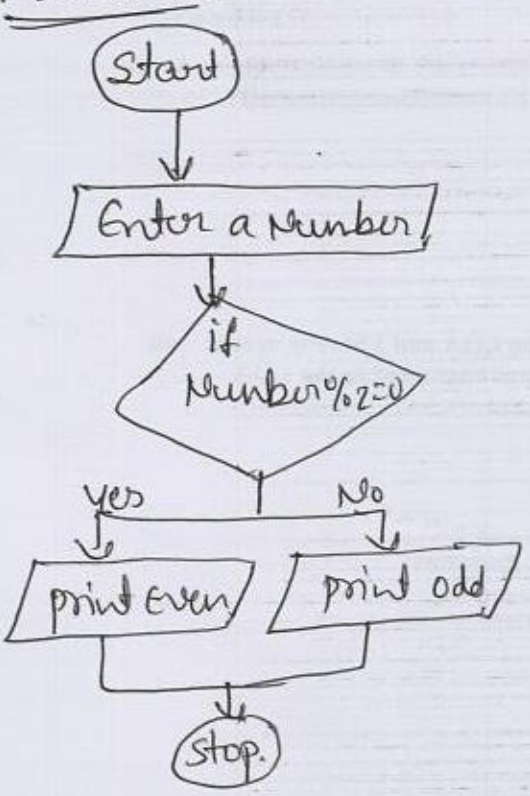
① Integer is odd or even

Flowchart.



Pseudocode

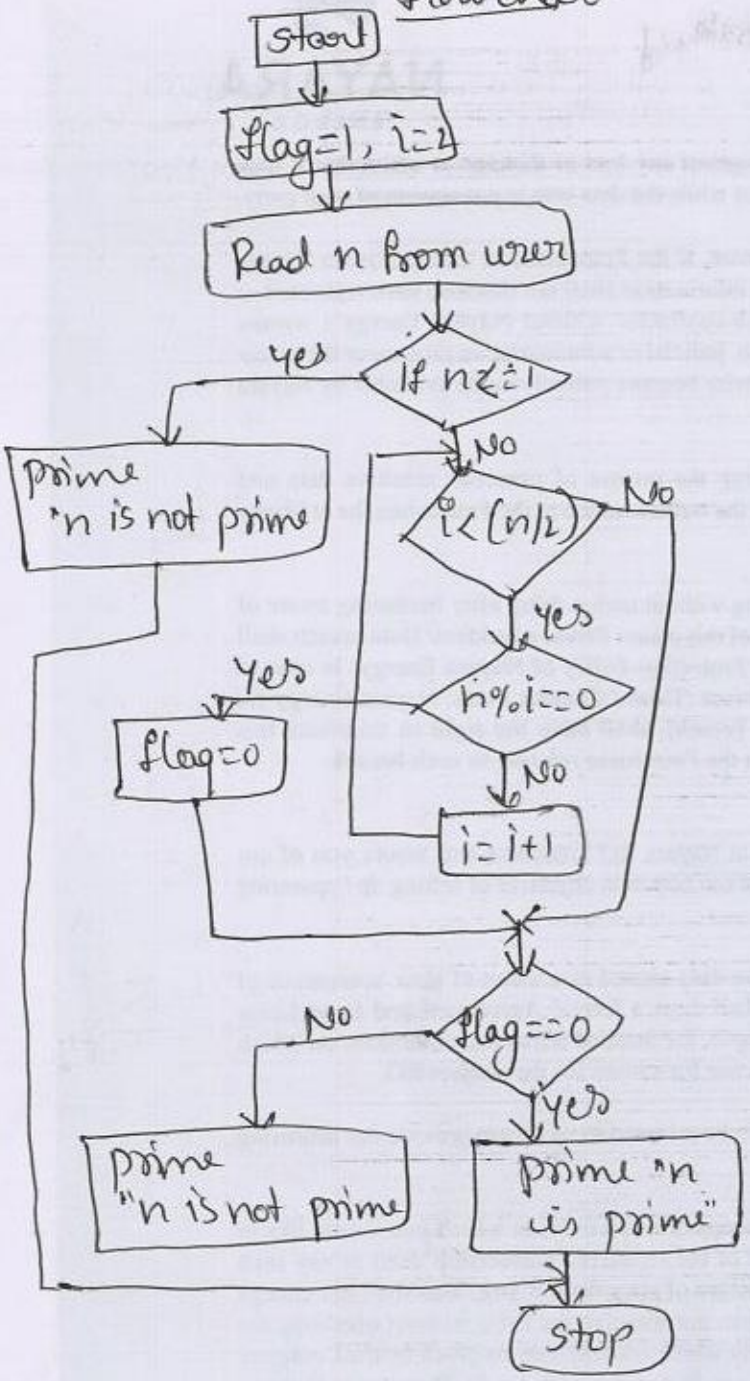
```
Read Number
remainder = number%2
If remainder == 0
 Write "even number"
Else
 Write "odd Number"
EndIf.
```

Java program.

```
import java.util.*;
public class program
{
  public static void main(String args[]){
     Scanner ss = new scanner(System.in);
     System.out.println("Enter the Numbers");
     int  n = ss.nextInt();
     if (no%2==0)
     {
       System.out.println ("Entered number is Even");
     }
     else
     {
     System.out.println ("The number is odd");
     }.
```

(2) Integer is prime or not.

Flowchart



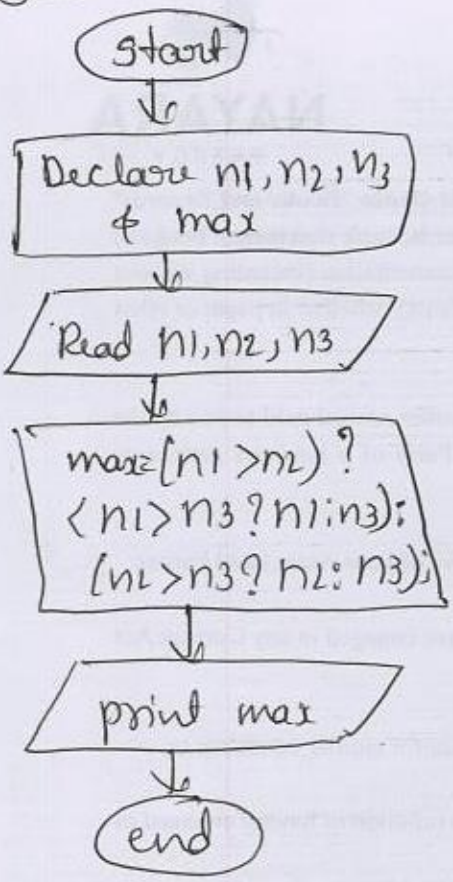
Psuedocode

1) Start
2) Initialize variable num, flag = 1, j = 2
3) Read num from user
4) If num <= 1
   Display "num is not a prime number"
   Goto step ⑦.
5) Repeat the step until j < [(n/2)+1]
   i) if remainder of number devide j equals to 0.
      set flag = 0
      goto step 6
   ii) j = j+1
6) if flag == 0,
   Display num+" is not prime number"
   else
   Display num+" n is prime number"
7) stop.

Java program.

```
public class prime{
  public static void main (String args[]) {
    int i, m=0, flag=0;
    int n=3;
    m=n/2;
    if(n==0||n==1){
     System.out.println(n+"is not prime number");
    }
    else{
     for(i=2; i<=m; i++){
      if (n%i==0){
       System.out.println(n+"is not prime number");
       flag=1;
       break;
      }
     }
     if(flag==0){
      System.out.println(n+"is prime number");
       }
    }
   }
  }
```

③ largest 3 number.



Pseudo code

1) Declare a variable a, b, c & largest as integer
2) Read the number a, b & c
3) max = a>b ? (a>c ? a : c) : (b>c ? b : c);
4) print max.

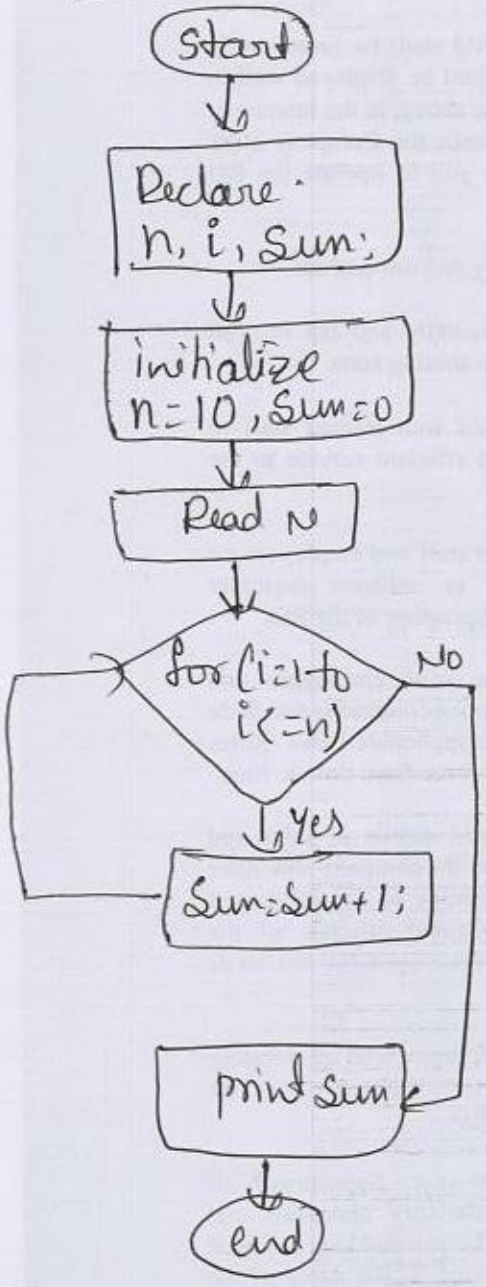
program

```
public class Bignumber{
 public static void main (String args[]){
  int a, b, c;
  Scanner s= new Scanner (System.in);
  System.out.println ("enter 1st number");
   a = s.nextInt();
  System.out.println ("enter 2nd number");
   b = s.nextInt();
  System.out.println ("enter 3rd number");
    c = s.nextInt();
  if(a>b && a>c){
   System.out.println ("largest number is:"+a);
  }
  else if (b>c)
  {
  System.out.println("largest No is :"+b);
  }
  else{
  System.out.println("Large No is:"+c);
```

(5) Sum of First N Integers

a) loop.

Flowchart



Pseudocode

1) Declare a variable
n, i, Sum as integer

2) Read number n;

3) for i upto n increment i by 1 and i=1

{
Sum = Sum + 1;
}
print Sum;

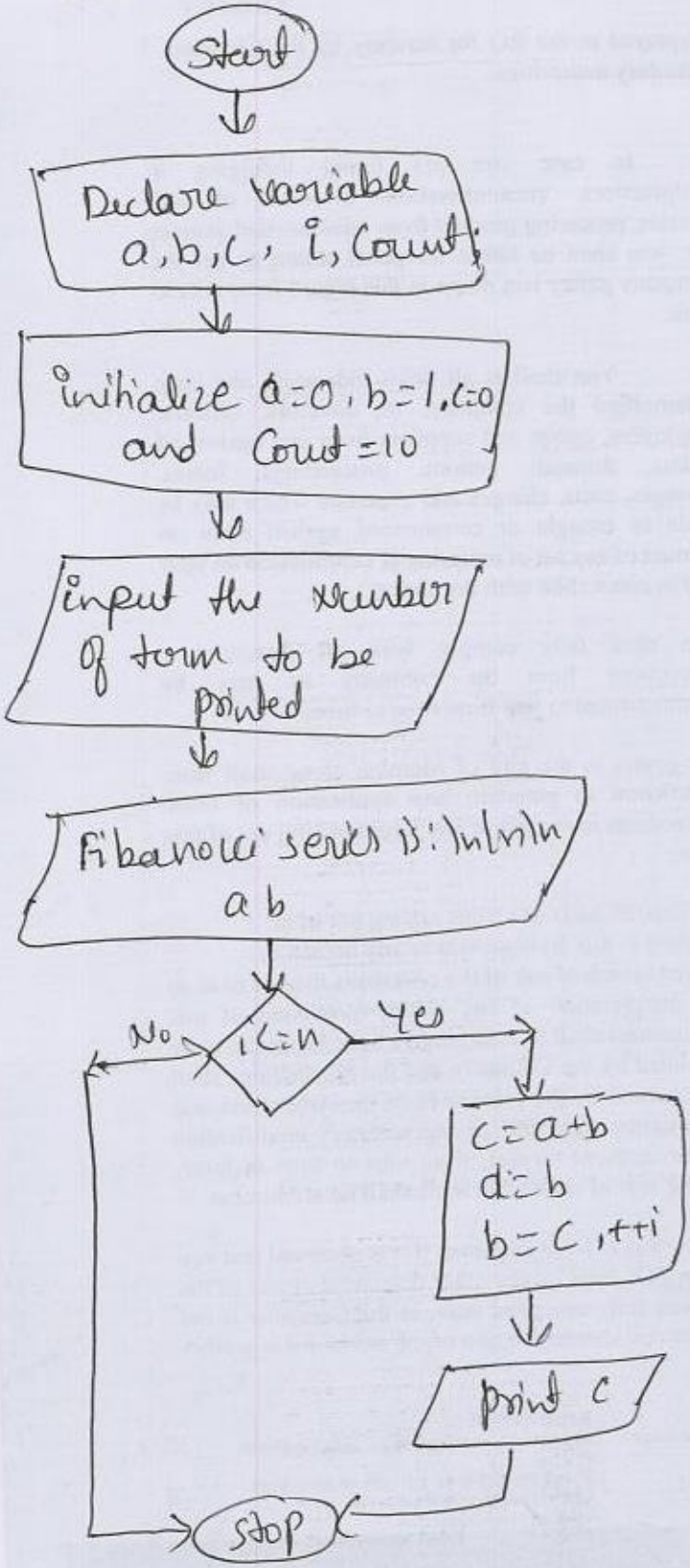
Java program

a) public class Sum {
public static void main(String args[])
{
int i; n = 100, Sum = 0;
for (i=1; i<=n; ++i)
{
Sum = Sum + 1;
}
System.out.println("Sum of N integer is =" + Sum);
}
}

b) public class Sum {
public static void main(String args[])
{
int i=n, n=100, Sum=0;
Sum = n*(n+1)/2;
System.out.println("Sum of N integers is=" + Sum);

⑥ Fibonacci series starting ~~from~~ with 0, 1

Flowcart



Pseudocode

1) start
2) Declare variable a, b, c, i, Count
3) Initialize the variable a=0, b=1, and Count=10
4) Enter the number of terms of Fibanocci series to be printed.
5) print first two terms of series
6) use loop for the following steps
7) ~~c~~ a+b
   a=b
   b=c
   increase value of i each time by 1
   print the value of show
8) End

Java program

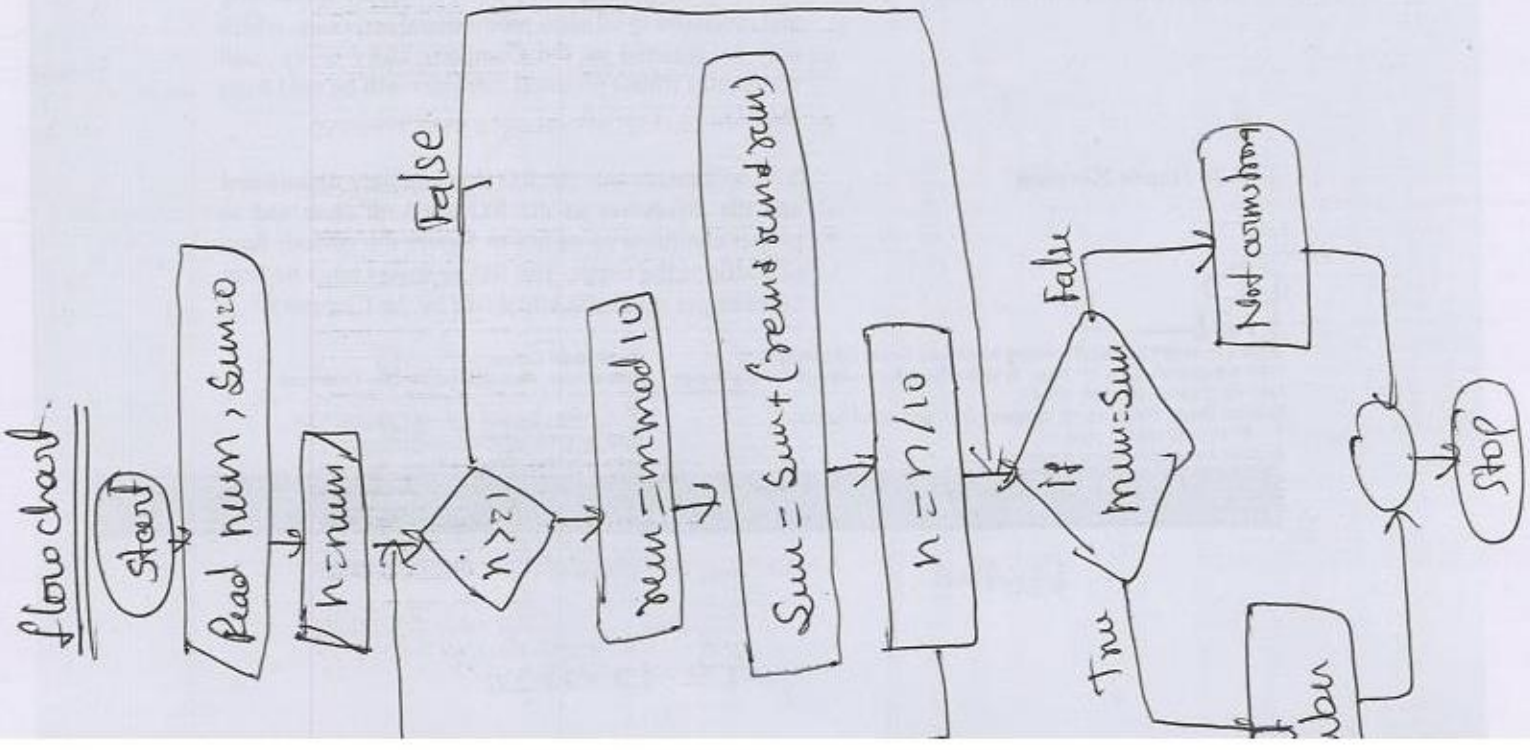
```
Public class fibanocci {
  public static void main(String args
  { int a=0, b=1, c, i, Count=10;
  System.out.println(a+" "+b);
  for (i=1; i<Count; ++i) {
      c=a+b;
      System.out.print(" "+c);
```

(7) Armstrong.

pseudoCode

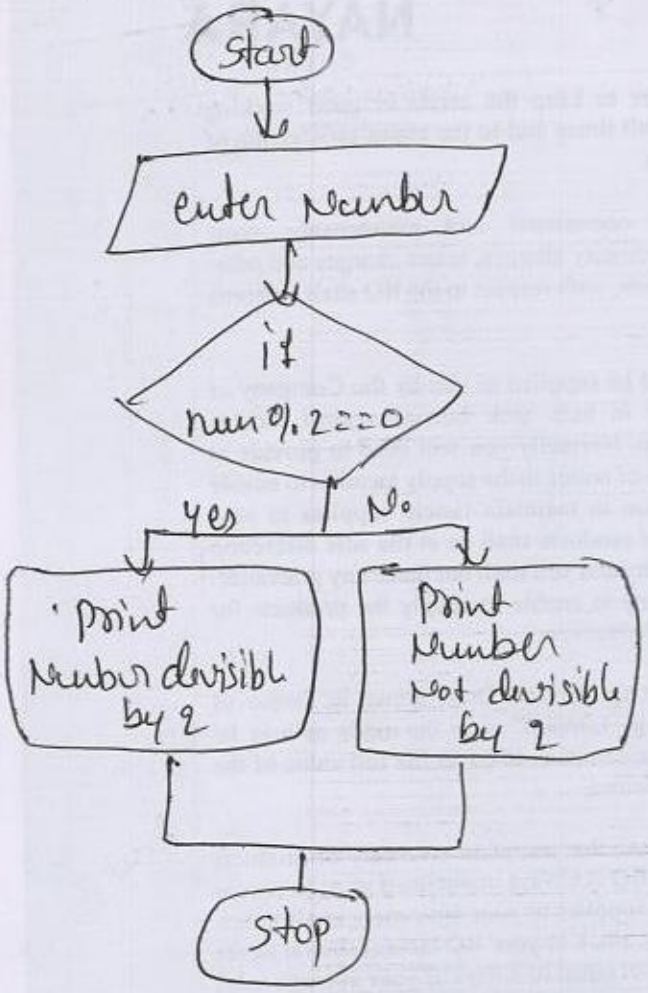
1) input the number
2) Initialize Sum=0, temp=n;
3) Find the total number of digits in the number
4) Repeat until. (temp!=0)
5) ~~Repeat~~ ~~until~~ Remainder = temp % 10
6) result = result + pow (remainder, n)
7) temp = temp / 10
8) if (result == number)
9) Display "Armstrong"
10) Else
11) Display "Not armstrong

flow chart.



(8) Number is divisible by a) 2, b) 3, c) 5, d) 9.

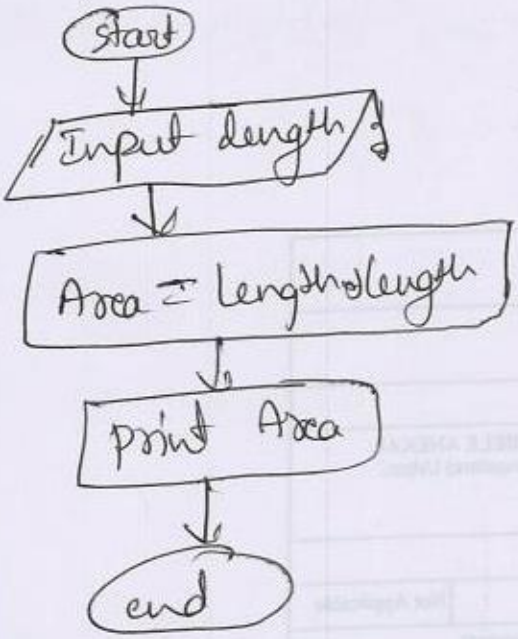
Flowchart



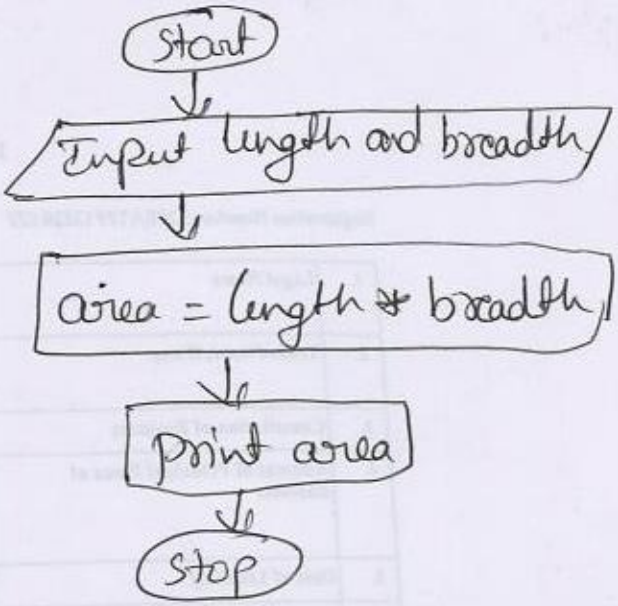

```
Read Number
remainder = num%3
if reminder ==0
   write "Number divisib
     le by 3"
   else
   write " Number Not
     divisible by 3"
```

(9) Area of squar and rectangle given length & breadth.

a) Flow chart



b) Flowchar



PSudoCode

1) Input the number
2) Area = length * length
3) print area

PSudoCode

1) Input the length and breadth
2) Area = length * breadth
3) print area.

(10) Given length of 3 sides, check it triangle can be constructed.