Varargs

➤ Varargs is nothing but variable length arguments
➤ Varargs should be taken as formal parameter in method definition
➤ Varargs can take 0 arguments N.no.of arguments
➤ Varargs internally works a Single dimensional Array and It is dynamic
➤ If required we can also pass an array as an argument to the varargs parameter
➤ **With the help of varargs we can avoid defining methods overloading whenever you want perform same operation for irrespective no.of.argument of same type**
➤ Varargs can be also takes along with other type of parameter but in this case varargs should be last argument.

```
class Maths
{
   int sum(int x,int y)
       { return x+y; }

   int sum(int x,int y,int z)
      { return x+y+z; }
   .
   .
   .
   .
   .
}
```

```
int sum(int...x)  //  works as SD
{
  int s=0;
  for(int i:x)
     {s=s+i;}
  return s;
}
```

```
   Maths m=new Maths( );
        m.sum(10,20);
        m.sum(10,20,30);
        m.sum(10,20,30,40,50);
```

Example 1:

```java
//Maths.java
class Maths
{
        int sum(int...x)  //...varargs -> SDA
        { int s=0;
          for(int i:x)
                {s=s+i; }
          return s;
        }

   public static void main(String args[ ])
        {
          Maths m=new Maths();
          int s=m.sum(10,20);
          System.out.println("Sum is : "+s);

          s=m.sum(10,20,30);
          System.out.println("sum is : "+s);

          s=m.sum(10,20,30,40,50);
          System.out.println("Sum is : "+s);

          s=m.sum();
          System.out.println("Sum is : "+s);

          int[ ] a={10,20,30,40};
          s=m.sum(a);  //a is int[ ]
          System.out.print("Sum is : "+s);
        }
}
```

Example 2:
//Student.java

```
class Student
{
        void findResult(String name,int...m)  //int[ ] m
        {
                System.out.println("Name is : "+name);
                System.out.println("Marks ");
                int s=0;
                for (int i:m)
                {
                        System.out.println(i);
                        s=s+i;
                }
                System.out.println("----------------");
                System.out.println("Total is : "+s);
                System.out.println("=====================");
        }

        public static void main(String args[ ])
        {
                Student s=new Student();
                        s.findResult("Manasa",40,50,60);
                                s.findResult("Mamatha",40,50);
                                s.findResult("Cnu",30);
                                s.findResult("anu");
        }
}
```