Variable Argument (Varargs):

The varrags allows the method to accept zero or muliple arguments. Before varargs either we use overloaded method or take an array as the method parameter but it was not considered good because it leads to the maintenance problem. If we don't know how many argument we will have to pass in the method, varargs is the better approach.

Advantage of Varargs:

We don't have to provide overloaded methods so less code.

Syntax of varargs:

The varargs uses ellipsis i.e. three dots after the data type. Syntax is as follows:

1. return_type method_name(data_type... variableName){}

Simple Example of Varargs in java:

```
1.
2. class VarargsExample1{
3.
4.  public  static void display(String... values){
5.   System.out.println("display method invoked ");
6.  }
7.
8.  public static void main(String args[]){
9.
10. display();//zero argument
11. display("my","name","is","varargs");//four arguments
12. }
13. }
14.
```

Test it Now

```
Output:display method invoked
        display method invoked
```

Another Program of Varargs in java:

```
1.
2.  class VarargsExample2{
3.
4.   static void display(String... values){
5.    System.out.println("display method invoked ");
6.    for(String s:values){
7.     System.out.println(s);
8.   }
9.  }
10.
11. public static void main(String args[]){
12.
13.  display();//zero argument
14.  display("hello");//one argument
15.  display("my","name","is","varargs");//four arguments
16. }
17.}
18.
```

Test it Now

```
Output:display method invoked
        display method invoked
        hello
        display method invoked
        my
        name
        is
        varargs
```

download this example

Rules for varargs:

While using the varargs, you must follow some rules otherwise program code won't compile. The rules are as follows:

- There can be only one variable argument in the method.
- Variable argument (varargs) must be the last argument.

Examples of varargs that fails to compile:

1.
2. void method(String... a, int... b){}//Compile time error
3.
4. void method(int... a, String b){}//Compile time error
5.

Example of Varargs that is the last argument in the method:

1.
2. class VarargsExample3{
3.
4. static void display(int num, String... values){
5.   System.out.println("number is "+num);
6.   for(String s:values){
7.   System.out.println(s);
8. }
9. }
10.
11. public static void main(String args[]){
12.
13. display(500,"hello");//one argument
14. display(1000,"my","name","is","varargs");//four arguments
15. }
16. }
17.

Test it Now

```
Output:number is 500
        hello
        number is 1000
        my
        name
        is
        varargs
```