How to find out the lenght of the array :

Array is a reference data type. It is an object in java. Whenever we create an array object then by default we are getting a properly sized length, by using this length property we can find out the length of the array.

```
//program
//Finding the length of the array
public class ArraLength
{
    public static void main(String[] args)
    {
        int [ar = {10,20,30,40};
        System.out.println("Length of the array is :"+ar.length);
        System.out.println("Length of the array is through command line arguement :"+args.length);
    }
}
-------------------------------------------------------------------------
//Finding the length of the array using command line argument

public class ArraLengthUsingCommand
{
    public static void main(String[] args)
    {
        System.out.println("Length of the array is :"+args.length);
    }
}

javac ArraLengthUsingCommand.java

java ArraLengthUsingCommand
Length of the array is :0

java ArraLengthUsingCommand 34
Length of the array is :1

java ArraLengthUsingCommand 34 Rav
Length of the array is :2
```

What is Eclipse IDE ?

IDE stands for "Integrated Development Environment". By using eclipse IDE, we can develop, compile and execute our java program in a single window.

The main purpose of Eclipse IDE is reduce the development time, once the development time will be reduced then automatically the cost of the project will be reduced.

How to create a Project in Eclipse IDE :

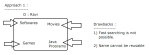
File -> New -> Project OR Java Project -> Provide the name for the project (Batch 50) -> Finish

What is a package in java ?

A package is nothing but folder in windows. It is mainly used to arrange our java programs.

Example :

Approach 1 :



Drawbacks :

1) Fast searching is not possible.

2) Name cannot be reusable

Approach 2 :

If we arrange our java classes into a particular group by using packages (folders) then we will get the following two advantages :

1) Fast searching is possible.
2) Name can be reusable.

Example :

We have a Date class available in java.util package where as We have another Date class available in java.sql package.

Program that describes a package is folder in windows :

A package is a keyword in java and it must be the first statement of any java program.

Package related Program :

```
package basic.arithmetic;

public class Addition
{
    public static void main(String[] args)
    {
        int a = 12;
        int b = 24;
        System.out.println("Sum is :"+(a+b));
    }
}
```

Command for compilation of the classes which contains package statement.

[java] -d . Filename.java]

javac -d . Addition.java

If we compile Addition.java, Addition.java contains basic.arithmetic package, Here first of all basic folder will be created, inside basic folder another folder i.e.arithmetic will be created, this arithmetic folder will contain Addition.class file.

Command to run the above program :

java basic.arithmetic.Addition

Types of Packages :

1) Predefined OR Built-in package : The packages which are created by java software people for arranging the programs are called predefined packages.

Example : java.lang, java.util, java.io, java.sql, java.net and so on

2) User-defined Package OR Custom package : The packages which are created by user for arranging the user-defined programs are called user-defined package.

Example :
basic
arithmetic.basic
service.online_shopping
com.wipro.shopping_cart

How to execute command line argument program by using Eclipse IDE :

WAP in java to pass some value from command line argument based on the following criteria :

If the array length is 0 : It should print "length is 0"
If the array length is 1 : It should print square of the number
If the array length is 2 : It should print sum of the number

```
package com.rest.command_line_argument;

public class PrintAdditionOrSquare
{
    public static void main(String[] argv)
    {
        if(argv.length==0)
        {
            System.out.println("Length is zero");
        }
        else if(argv.length ==1)
        {
            int var = Integer.parseInt(argv[0]);
            System.out.println("Square of 'var+' is :"+(var*var));
        }

        else if(argv.length==2)
        {
            int num1 = Integer.parseInt(argv[0]);
            int num2 = Integer.parseInt(argv[1]);
            System.out.println("Addition is :"+(num1+num2));
        }

    }
}
```

Steps to execute the command Line Argument Program using Eclipse IDE

Right click on the program -> Run As -> Run configuration -> Verify your main class name -> select argument tab -> pass the appropriate value -> Run