

Limitation of Command Line Argument:
 As we know by using Command Line Argument, we can pass static values at runtime. These values are static and cannot be changed. If we want to change the input value, we can do it by taking the value from user as shown in the program.

```
package com.example.java_program;
class Input {
  public static void main(String[] args) {
    String str = System.getProperty("user.name");
    System.out.println("User Name is : " + str);
  }
}
```

Note : In this program, after providing the given value, it is asking for Gender which is not a variable.

Note : `String.valueOf()` is a predefined non static method of String class, which is used to convert any primitive type to String based on the same datatype.

Ques 1 : How to take input from user in Java?

* There are two ways to take the input from the user which are as follows :

- 1) `java.util.Scanner`
- 2) `java.lang.StringBuffer`
- 3) `java.io.BufferedReader` (Used to read lines)
- 4) `java.io.InputStreamReader`

Note : It is always better to use Scanner class.

* To take input from user in Java, we can use `System.in`.

* We can also use `java.util.Scanner` package to work differently by giving user friendly message.

state Full of Scanner class :

* Scanner class has provided the following state methods, In order to use and execute these methods, we need to create object of Scanner class.

Non static methods of Scanner class :

- 1) `public String next();` Used to read a single word.
- 2) `public String nextLine();` Used to read multiple words or complete line.
- 3) `public String nextWord();` Used to read next word.

4) `public char next();` Used to read short value.

5) `public double nextDouble();` Used to read double value.

6) `public float nextFloat();` Used to read float value.

7) `public long nextLong();` Used to read long value.

8) `public int nextInt();` Used to read int value.

9) `public boolean nextBoolean();` Used to read boolean value.

10) `public char nextChar();` Will read a single character.

Ques 2 : How to read your name from the user ?

Answer : By using Scanner class.

```
public class ReadName {
  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter your name : ");
    String name = sc.nextLine();
    System.out.println("Your Name is : " + name);
  }
}
```

Note : Due to a bug in Java, we can't use `nextLine()` method to read the entire line in Java and `next()` method will read only first word. So, we have to use `nextLine()` method to read the entire line.

Ques 3 : How to read multiple values from the user in Java?

Answer : By using Scanner class.

```
public class ReadMultipleData {
  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter your First Name : ");
    String fname = sc.nextLine();
    System.out.print("Enter your Middle Name : ");
    String mname = sc.nextLine();
    System.out.print("Enter your Last Name : ");
    String lname = sc.nextLine();
    System.out.println("Your Full Name is : " + fname + " " + mname + " " + lname);
  }
}
```

Ques 4 : What is the role of separator in Java?

* It is used to separate.

* It is used to inform the compiler how things are grouped in the code.

Q) It is used to separate.

A) It is used to group.

B) It is a symbol which describes that how a calculation will be performed on constants.

Table Of Operator :

Arithmetical Operators
<code>+</code>
<code>-</code>
<code>*</code>
<code>/</code>
<code>%</code>
<code>++</code>
<code>--</code>
<code>+=</code>
<code>-=</code>
<code>*=</code>
<code>/=</code>
<code>%=</code>

Relational Operators :

Relational Operators
<code><</code>
<code>></code>
<code>=</code>
<code><=</code>
<code>>=</code>
<code>!=</code>

Logical Operators :

Logical Operators
<code> </code>
<code>&&</code>
<code>!</code>
<code>==</code>
<code>!=</code>