WAP to find out the square of a given number by using Command line Argument :

FindSquare.java

```
void main(String [ ] x)
{
    int num = Integer.parseInt(x[0]);
    IO.println("Square of "+num+" is : "+(num*num));
}
```

javac FindSquare.java
java FindSquare 3
Output : Square of 3 is : 9

WAP to read a character from the command line Argument :

* As we know String is a collection of character, Internally it is a character array,

String s1 = "hai";

```
      0   1   2
    | h | a | i |
```

* String class has provided a predefined non static method called **charAt(int indexPosition)**
  by using this charAt(int indexPosition) method, we can retrieve a character from the given
  String using index position.

        public char charAt(int indexPosition)

Character.java
```
void main(String [] args)
{
    String gender = args[0];
    char ch = gender.charAt(0);
    IO.println("Your Gender is : "+ch);
}
```

javac Character.java
java Character Male

Output : Your Gender is : M

How to find out the length of an array in java :

* In Java, Whenever we create an array then automatically we are getting and **length property
  OR length variable.**

* This length property will be automatically created during the array creation and after creation of
  array the length is fixed [We cannot increase OR decrease the length]

Example :

            int [] arr = {10, 20, 30, 40, 50};
                    arr.length;   //5 [The length of the array is 5]

WAP in java to print the length of the array :

Array.java
```
void main(String [] args)
{
    //Homogeneous elements
    int arr[] = {10, 20, 30, 40, 50, 60};
    IO.println("The length of the array is :"+arr.length);

    IO.println("................");

    //Heterogeneous elements
    Object [ ]a = {10, 12.80, 'A', "NET", true};
    IO.println("The length of the array is :"+a.length);
}
```

Take the values from the command line arguments and perform the following operation :

a) If the length of the command line argument is 0 Print, No Value from the command line argument
b) If the length of the command line argument is 1, find the cube of the given number
c) If the length of the command line argument is 2, Print the addition of both the numbers

FindCubeAndAddition.java

```
void main(String [] args)
{
    if(args.length==0)
    {
        IO.println("No value is passed from command line argument");
    }
    else if(args.length == 1)
    {
        int num = Integer.parseInt(args[0]);
        IO.println("Cube of "+num+" is :"+(num*num*num));
    }
    else if(args.length == 2)
    {
        int x = Integer.parseInt(args[0]);
        int y = Integer.parseInt(args[1]);

        IO.println("The sum of "+x+" and "+y+" is :"+(x+y));
    }
}
```

WAP to find out the area of circle where radius must be taken from the Command line Argument :

How to convert String into double :

public static double parseDouble(String x)

Example :
            String str = "12.90";
            double val = Double.parseDouble(str);   //Converting String to double

How to convert String into float :

public static float parseFloat(String x)

Example :
            String str = "12.99";
            float val = Float.parseFloat(str);   //Converting String to float

//Prepare
AreaOfCircle.java
```
void main(String [] args)
{
    final double PI = 3.14;

    //Converting String to double
    double radius = Double.parseDouble(args[0]);

    double areaOfCircle = PI * radius * radius;

    IO.println("Area of circle is :"+areaOfCircle);
}
```

What is Naming Convention OR Coding Standard in Java ?

Naming convention provides two important characteristics :

a) Standard Code [Industry accepted code]
b) Readability of the code set enhance.

1) How to write a class in java :

While writing a class in java, we should follow classical naming convention, According to this each word
first character must be capital and it should not contain any space. In java a class represents noun.

Example :
ThisIsExampleOfClass

System
String
Integer
CommandAddition
ArrayIndexOutOfBoundsException
DataInputStream

2) How to write a method in java :

While writing a method in java we should follow camel case
naming convention, According to this naming convention first word will be in small and 2nd word
onwards, each word first character must be capital. In java a method represents verb.

Example :
thisIsExampleOfMethod()
read()
readLine()
parseInt()
charAt()
toUpperCase()

3) How to write a field/variable in java :

While writing a variable/field we should follow camel case naming convention but unlike method
variable does not have () symbol.

Example :
rollNumber
customerName
customerBill
studentName
playerName

4) How to write a final and static field :

While writing the final and static field we should follow snake_case naming convention.
Each character must be capital and in between two words we must have _ symbol.

Example :
byte.SIZE   [SIZE is final and static field]
Byte.MIN_VALUE   [MIN_VALUE is final and static field]
Byte.MAX_VALUE   [MAX_VALUE is final and static field]

5) How to write a package :

A package must be written in lower case only. Generally it is reverse of company name.

com.nit.basic
com.tcs.shating
com.wipro.shopping