Regular Expression :

- mechanism of allowing text procesing

- special text string for performing search, edit or manipulate text and data

- Regex API available in java.util.regex package

Eg : myString.matches(“regex”) returns true or false depending upon whether myString can be entirely compared with regular expression

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

java.util.regex package contains following classes

1- Pattern

2- Matcher

3- PatternSyntaxException

1. PATTERN class
   1. Provides no public constructors
   2. To create a pattern one must first invoke one of its public static compile methods, which will then return a pattern object
   3. These methods accept a regular expression as first argument
   4. Methods:
      1. matcher()
      2. Matches()
      3. Compile()

2 - MATCHER class

* an instance of this class is the engine that interprets the pattern and performs match operation against an input string
* No public constructors
* Matcher instance is created by invoking matcher() method on a pattern object

3 – PATTERNSYNTAXEXCEPTION

* Unchecked exception that indicates an error in the regular expression syntax
* Methods:
  + getDescription()
  + getIndex()
  + getMessage()
  + getPattern()

Lesson 10 : ARRAYS

Array :

* fixed length data structure with zero indexed indexing
* Array in Java is creatd as an Object
* An object of array can be compared wth null

\*\*\*Multidimensional arrays:

* In java, multidimensional arrays are not stored in the form of matrix
* Multidimensional arraysa re considered as arrays or arrays and hence can hace asymmetrical arrays

class ArrayDemo {

int intNumbers[];

ArrayDemo(int i) // parameterized constructor

{

intNumbers = new int[i]; // intNumbers is an array initialized with size i(undefined)

}

void populateArray() //method

{

for(int i = 0; i < intNumbers.length; ++i)

intnumbers[i] = i; // array intNumbers{0,1,2,3,4,}

}

void displayContents()

{

for(int i = 0; i <intNumbers.length; ++i)

System.out.println("Number " + i + ": " + intNumbers[i]);

}

public static void main(String[] args) {

//Accepting array length as command line argument.

int intArg = Integer.parseInt(args[0]);

ArrayDemo ad = new ArrayDemo(intArg);

ad.displayContents();

ad.populateArray();

ad.displayContents();

} }

ENHANCED FOR LOOP

* Enhanced for loop (foreach) is used to iterate through collection and arrays

Review question :

1. True
2. false