**A.ENGAGE: Reflection**

**Misconception Check**

How the OOP works in arrays, table, string and files manipulation?

***Arrays*** allow us to store arbitrary sized sequences of primitive values or sequences of references to objects- Arrays allow easy access and manipulation to the values/objects that they store. Arrays are indexed by a sequence of integers. ***Strings***are widely used in Java programming, are a sequence of characters. In Java programming language, strings are treated as objects. ***Table*** is a natural representation to use: - Displays a grid of data consisting of rows and columns similar to a spreadsheet. - The JTableclass is NOT a spreadsheet, but it supports many features that make it superior to a simple spreadsheet component. ***File*** is tedious to type in all the data to be processed each time the program is run. It is not very useful if the data and results cannot be saved.

**B.EXPLORE:**

**Other class and methods**

**1. List down the other class and methods of string, file, array and table manipulation on the table below.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | |
| **STRING** | | **ARRAY** | | **TABLE** | | **FILE** | |
| **CLASS** | **METHOD** | **CLASS** | **METHOD** | **CLASS** | **METHOD** | **CLASS** | **METHOD** |
| **java.lang.String** | **charAt()** | **java.util package** | **static List** | **JTableclass** | **ExampleTable()** | **class CreateFile** | **Scanner kybd = new Scanner(System.in);** |
|  | **contains()** | **java.lang.Object** | **static int** | **public class ExampleTable** | **JFrame()** | **public class Payroll** | **Scanner inFile = new Scanner(new File(fName))** |
|  | **getChars()** | **java.lang.Objectjava.util.AbstractCollection<E>** | **static boolean** |  |  |  | **String name = inFile.next()** |
|  | **indexOf()** | **java.util.ArrayList<E>** | **static void** |  |  |  |  |
|  | **replace()** |  | **binarySearch** |  |  |  |  |
|  | **toCharArray()** |  | **equals** |  |  |  |  |
|  | **toLowerCase()** |  | **fill** |  |  |  |  |
|  | **toUpperCase()** |  | **asList** |  |  |  |  |
| **Java StringBuffer** | **StringBuffer()** |  | **sort** |  |  |  |  |
|  | **StringBuffer(String str)** |  |  |  |  |  |  |
|  | **StringBuffer(int capacity)** |  |  |  |  |  |  |
|  | **append(String s)** |  |  |  |  |  |  |
|  | **insert(int offset, String s)** |  |  |  |  |  |  |
|  | **replace(int startIndex, int endIndex, String str)** |  |  |  |  |  |  |
|  | **delete(int startIndex, int endIndex)** |  |  |  |  |  |  |
|  | **reverse()** |  |  |  |  |  |  |
|  | **capacity()** |  |  |  |  |  |  |
| **StringBuilder** |  |  |  |  |  |  |  |