Assignment NO-2

Que 1) Write a difference between Scanner & Bufferreader class.

→

Scanner	Buffer Reader.
1) Scanner has little buffer of 1 kB char buffer.	1) BufferReader has large buffer of 8kB byte buffer.
2) Scanner has method like nextInt(), etc.	2) BufferReader has method like parseInt(), Parseshort etc.
3) Scanner has method nextline() to read a line	3) BufferReader has method readline() to read a line().
4) Scanner is not Synchronous in nature. And should be used only in single threaded case	4) BufferReader is Synchronous in nature During multithreading environment BufferReader should be used.

Que 2) What is blank final Variable?

→ A blank final variable is a final variable that is not initialized during declaration.

Que 3) Explain various ways to declare and initialize one dimentional array in java.

→ A one dimentional array in java is a linear list of element of the same type To create a one dimentional array, we

have Various ways to declare and initialize —

Array declaration

Syntax - type array-name[];

or,

type [] array-name;

Here type declare the base type of the array and array-name is the name of the array.

Example:- int [] intarray;

This declare an array named Intarray. However the array does not exist. The int array is set to null which represent an empty array.

byte [] bytearray;

Object [] objArray [];

Student [] StudentArray;

Que 4) List the different types of variable in java. Explain each type in detail with example

→ There are three types of variable in java.

i) local Variable.

ii) Instance Variable.

iii) Static Variable.

(i) local Variable :-

A Variable declare inside the body of the method is called local Variable. You can use this Variable only

within that method and the other method in the class aren't even aware that the variable exists.

A local variable cannot be designed with "static keyword"

Ex :-
```
public class studentdetails.
  {
    public void Studentage ()
      {
        // local variable age
        int age = 0;
        age = age + 5;
        System.out.println("student gage.
                is:" .+age);
      }
    public static void main (String args[])
      {
        Student details obj = new.
                studentdetailsis ();
        obj.StudentAge ();
      }
  }
```

(ii) Instance Variable :-

A variable declare inside the class but outside the body of the method is called instance variable. It is not declare as static it is called ~~st~~ instance variable because it's value is instance specific and is not should among instance.

Ex:-

```
import java.io.*;
class Mark
{
    // these Variable are instance Variable
and are not inside any function
    int engMarks;
    int mathsMarks;
}
class marksdemo
{
    public static void main (string args[])
    {
        Marks Obj = new marks();
        Obj1.engMarks = 50;
        obj1.mathsmarks = 90;

        Marks obj 2 = new marks();
        Obj2.engMarks = 70;
        Obj2.MathsMarks = 60;

System.out.println("Marks for first object:");
System.out.println( obj1.engMarks);
system.out.println (obj2.mathsMarks);

System.out.println("Marks for second object:");
System.out.println(Obj2.engMarks);
system.out.println (obj2.mathsMarks);

    }
}
```

(iii) Static Variable :-

A Variable which is declared as static is called static Variable. It can be local you can create a single copy of static variable and share among all the instance of the class.

```
Ex:- Class A {
        int data = 50; //instance Variable.
        Static int m = 100; //Static Variable
        Void method ()
        {
            int n = 90; // local Variable.
        }
    }
```

Que 5) What are the packages required for following classes?

a) Scanner, b) BufferedReader, c) Date
d) SimpleDateformat, e) string.

→

a) Scanner - java.util.pascanner;

b) BufferReader - java.io.;

c) Date - java.util.*;

d) SimpleDateformat - java.text.SimpleDateF

e) String - java.lang.String class.

Que 6) which exception should be caugth at Compile time while using BufferReader Class?

→ when we using BufferReader Class it saying "unexpected exception java.io.IoExceptio must be caught or declared to be thrown.

Que 7) What is final Variable? write various ways to initialize it with example?

→ A final Variable is a constant whose value cannot be changes. A final Variable must be initialized and once initialized it cannot be changed. Any attempt to alter it results in a Compile time error.

Syntax
Example :- final type identifier = value;
Ex :- final float Pi = 3.142
final int = 5
static final double PI = 3.14.

```
Ex :- class Bike
      {
        final int Speedlimit = 90; //final Variable
        Void main()
        {
          Speedlimit = 400;
        }
      Public static Void main (String [] args)
        {
```

```
        Bike obj = new Bike();
        obj.run();
    }
}
```

Ques8) List various primitive data types supported by java?

→ primitive data types are -
i) integer types :- byte, short, int, long;
ii) floating point :- float, double;
iii) character type :- char.
iv) Boolean type :- Boolean.

Ques9) State true or false

a) Command line index start with 1 in java.

→ False.

b) Command line argument contains java file name as it's first parameter.

→ False

Que10) List all method which accept String like "Good Morning"

→ Syntax :- <String-Type> <String-Variable> = "<sequence-of-string>";

String str = "Good Morning";

- String literal -
  String s = "Good Morning";

- using new keyword -
  String s = new String ("Good Morning");

Que ii) List the difference between next() and nextline() method of Scanner Class.

→

Next()	Nextline()
i) It read input from the input device till the space character	i) It read input from the input device till the line change.
ii) It cannot read those words having space in it	ii) It can read those words having space in it.
iii) It ends reading the input after getting space.	iii) It ends reading the input after getting "\n" or press enter"
iv) It places the cursor in the same line after reading the input.	iv) It places the cursor in the next line after reading the input.
v) Syntax to ~~sca~~ scan input scanner.next()	v) Syntax to scan input scanner.nextline()