Java Open Book Assignment 1DS18EC091 Sudhanshu BN

1) Print writer class in Java

-This class gives prints formatted representations of object to a text o/p stream. It implements all of the print methods found in print stream. It does not contain methods for writing raw bytes for which a program should use unencoded byte streams

- Its automatic flushing is enabled it will be done only when one of the println, printf or format methods is invoked, rather than whenever a newline character is output. Methods in class never through I/O exceptions, although some of its constructors may. The client may inquire as to whether any errors have occurred by invoking check error.

Constructor & descriptive examples

- PrintWriter (File file); without automatic line flushing
- PrintWriter (OutputStream out); create new print writer without automatic flushing.
- PrintWriter (String fileOutputStream out, boolean autoFlush): new printer from existing OutputStream

Advantages

- printWriter print, println method can accept any type of parameters, and BufferedWriter's write method can only accept characters, character arrays & strings
- PrintWriter's println method automatically adds a newline
- The PrintWriter method doesn't throw an exception. If you care about the exception you need to call the checkError method to see if an exception occurs.
- The PrintWriter constructor can specify parameters to implement auto refresh cache (AutoFlush)

- PrintWriter is constructed more widely

2.) StringBuffer is a peer class of String that provides much of the functionality of Strings. String represents fixed length immutable character sequences while StringBuffer represents growable and writable character sequences

It may have characters & substrings inserted in the middle or appended to the end. It will automatically grow to make room for such additions & often has more characters preallocated than are actually needed, to allow room for growth.

```
class StringBufferExamples {
    public static void main (String args[]) {
        StringBuffer sb = new StringBuffer("Sudhanshu");
        sb.reverse();
        ~~StringBuffer sb1 = new StringBuffer~~
        StringBuffer sb1 = new StringBuffer ("Sudhanshu BRV, ");
        sb1.append ("PSCE");
        StringBuffer sb2 = new StringBuffer ("stringbuffer");
        System.out.println (sb);
        System.out.println (sb);

        system.out.println ("string:" +sb2);
        system.out.println ("character at index 2:" +sb.charAt(2));
    }
}
```

Output:

uhsmahdas

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string : stringbuffer
character at index 2 : r