**Sequential Execution And Program Errors:**

**Solution 1.**

**i)** For dividing the programs into pieces to make them easier to manage and to share the pieces between more than one program - software reuse.

**ii)** reserved word *public.*

**iii)** The class is declared by using *class* keyword.

**Solution 2.**

**i)** Java does not care how we lay our code out, as long as we use some white space to separate adjacent symbols that would otherwise be treated as one symbol.

**ii)** Split our program sensibly, rather than arbitrarily, into separate lines, and use spaces at the start of some lines to maximize the readability of our code. The idea of indentation is that the more nested a part of a code is, the more space it has at the start of its lines.

**Solution 3.**

**i)** list of Strings.

**ii)** args[0] is the first command line argument given to the program, if there is one.

We can access the individual strings by placing the index value in square brackets after the name of the list.

args[0];

**Solution 4.**

**i)** Human

**ii)** When we break the syntax rules of the language.

**iii)** When we obey the rules of syntax but what we have written does not make any sense.

It has no semantics (no meaning).

**iv)** Java Syntactic Errors and many semantic errors and be detected by the compiler when it processes our program. Errors that the compiler can detect are called compile time errors.

**v)** Since check for syntax and not meaning hence it cannot detect runtime errors.

**vi)** The program is meaningful as far as Java is concerned, it is just that our program does the wrong thing compared with what we wanted.

**Solution 5.**

Java statements are executed sequentially by the compiler and turns each one into corresponding byte codes which are then executed by virtual machine.

**Solution 6.**

**i)** The main method always starts with following heading:

public static void main(String[] args).

**ii)** The main method must be declared public otherwise the program could not be run by the virtual machine if the starting point was not accessible to it.

**Solution 7.**

**i)** The program would not be able to start if the main method was not allowed to run in the static context.

**ii)** The main method does return any value hence we write return value as void.

**iii)** The main method is called main because it is the main part of the program.

**iv)** public class className

{

public static void main(String[] args)

{

*To perform a particular task.*

}

}

**Solution 8.**

System is a class( that is a piece of code) that comes as part of Java’s application programming interface(API) - a large number of classes designed to support our Java program (similar classes kept in packages).{Inside System there is a thing called out. And this has a method called println. }

**Solution 9.**

**i)** A command in a programming language such as Java which makes the computer perform a task is known as statement.

**ii)** This is a rule in the Java language syntax.

**Solution 10.**

**i)** double quotes.

**ii)** is ended on the same line they started on with a semicolon at the end.

**iii)** + operator is used to concatenate Strings.