**1.Explain about the main method in java?**

**public:**

It is an access specifier. We should use a public keyword before the main() method so that JVM can identify the execution point of the program.

**static:**

You can make a method static by using the keyword static. We should call the main() method without creating an object.

Static methods are the method which invokes without creating the objects, so we do not need any object to call the main() method.

**void:**

In Java, every method has the return type. Void keyword acknowledges the compiler that main() **method does not return any value.**

**main():**

It is a default signature which is predefined in the JVM. It is called by JVM to execute a program line by line and end the execution after completion of this method.

We can also overload the main() method.

**String arg**s**[]:**

The main() method also accepts some data from the user.It accepts a group of strings, which is called a string array.

It is used to hold the command line arguments in the form of string values.

Here, args[] is the array name, and it is of String type. It means that it can store a group of string. Remember,this array can also store a group of numbers but in the form of string only. Values passed to the main() method is called arguments.

These arguments are stored into args[] array, so the name args[] is generally used for it.

**2.What are the different Control flow Statements available in java?**

Java compiler executes the code from top to bottom. The statements in the code are executed according to the order in which they appear.

However, Java provides statements that can be used to control the flow of Java code. Such statements are called control flow statements.

It is one of the fundamental features of Java, which provides a smooth flow of program.

Java provides three types of control flow statements.

**1.Decision Making statements**

\*if statements

\*switch statement

**2.Loop statements**

\*do while loop

\*while loop

\*for loop

\*for-each loop

**3.Jump statements**

\*break statement

\*continue statement

3.What is the Difference between break and continue statements?

Following are the important differences between continue and break.

| **Sr. No.** | **Key** | **Break** | **Continue** |
| --- | --- | --- | --- |
| 1 | Functionality | Break statement mainly used to terminate the enclosing loop such as while, do-while, for or switch statement wherever break is declared. | Continue statement mainly skip the rest of loop wherever continue is declared and execute the next iteration. |
| 2 | Executional flow | Break statement resumes the control of the program to the end of loop and made executional flow outside that loop. | Continue statement resumes the control of the program to the next iteration of that loop enclosing 'continue' and made executional flow inside the loop again. |
| 3 | Usage | As mentioned break is used for the termination of enclosing loop. | On other hand continue causes early execution of the next iteration of the enclosing loop. |
| 4 | Compatibility | Break statement can be used and compatible with 'switch', 'label'. | We can't use continue statement with 'switch','label' as it is not compatible with them. |

**4.What is an Array? How will you declare an array in java?**

Arrays are used to store multiple values in a single variable, instead of declaring separate variables for each value.

**To declare Array:**

**Array litral:**

Int[] num={1,2,3,4,5};

**Array using new keyword:**

String[] name=new name[5];

**5.When will you get ArrayIndexOutOfBoundsException?**

The ArrayIndexOutOfBoundsException occurs whenever we are trying to access any item of an array at an index which is not present in the array. In other words, the index may be negative or exceed the size of an array.

The ArrayIndexOutOfBoundsException is a subclass of **IndexOutOfBoundsException**, and it implements the **Serializable** interface.

**6.Define the Syntax to create an object for a class.**

**ClassName objectName=new className();**

**Example:**

**Rectangle box = new Rectangle();**

* *box* is the object variable which stores a reference to the newly instantiated Rectangle object's memory location.

**7.What are the naming conventions to be followed while creating a class,**

**method and a variable. Explain with egs:**

**Pascal – Class -Eg: PrimeNumber.**

**Camel – Method, Variable, Object -Eg: primeNumber.**

**8.What is Variable ?How will you declare a variables in java?**

A variable in simple terms is a storage place which has some memory allocated to it. Basically, a variable used to store some form of data. Different types of variables require different amounts of memory, and have some specific set of operations which can be applied on them.

**Syntax:**  
Datatype variable\_name = variable\_value;

**8.What is String in java? Is it a Data Type?**

A string is a sequence of characters. In java, objects of String are immutable which means a constant and cannot be changed once created. String is slow and consumes more memory when we concatenate too many strings because every time it creates new instance.

**9.What are the different ways to create the String Object in java?**

There are two ways to create a String object:

By string literal: Java String literal is created by using double quotes. For Example: String s=”Welcome”;

By new keyword : Java String is created by using a keyword “new”.

10. What is the difference between .Equals and ==?

S.No. == Operator Equals() Method

1. == is considered an operator in Java. Equals() is considered as a method in Java.

2. It is majorly used to compare the reference values and objects. It is used to compare the actual content of the object.

3. We can use the == operator with objects and primitives. We cannot use the equals method with primitives.

4. The == operator can’t compare conflicting objects, so at that time the compiler surrenders the compile-time error. The equals() method can compare conflicting