**Java – Operators**

Q1: Give examples of Arithmetic operators

Answer: Some arithmetic operators are +, -, ++, -- etc

Q2:What is output of following program  
class A{

public static void main(String[] args){

int a = 10;

int b=20;

System.out.println(a++);

System.out.println(b++);

System.out.println(a);

System.out.println(b);

} }

Answer:

10

20

11

21

Q3: What is the output of following program?

class A{

public static void main(String[] args){

int a = 10;

int b=20;

a += 7;

b -= 3;

System.out.println(a);

System.out.println(b);

} }

Answer:

17

17

Q4: What is the output of following program?

class A{

public static void main(String[] args){

int a = 10;

int b=20;

System.out.println(a&b);

System.out.println(a|b);

} }

Answer:

0

30

Q5: What is the output of following program?

class A{

public static void main(String[] args){

int a = 10;

int b=20;

System.out.println(a>>1);

System.out.println(b<<2);

}}

Answer:

5

80

Q6: O/p of below program?

class A{

public static void main(String[] args){

int a = 10;

int b=20;

int c = a < b ? a > 8 ? 9 : 4 : 5;

System.out.println(c);

}}

Answer:

9

Q7: O/p of this- System.out.println(6 + 4 \* 5 + 2);

Answer: 28

Q8: O/p of this - System.out.println( (8 + 1)\* 4 + 5 \* 3);

Answer: 51

Q9: Write the if statement to print if a number is even or odd. (Use if else)

Answer:

If(number%2==0){

System.out.println(“Even”);

}

else{

System.out.println(“Odd”);

}

Q10: Program to find factorial of a number

Answer: Discussed in class in details

**Commands in Git**

Q1: What are branches in Git?

Answer : A branch is a version of the repository that diverges from the main working project. A git project can have more than one branch.

Q2 : What is the master branch in Git?

Answer : The master branch is the default branch in Git. It is instantiated when first commit made on the project. A repository can have only one master branch. Some companies may also use the name main for this starting branch.

Q3 : How to create a branch?

Answer : Use command git branch <branch\_name>

Eg: To create a dev branch we can create using, git branch dev

Q4 : How to see all branches of a repository ?

Answer: Use command: git branch

Q5 : How to move to a particular branch?

Answer : Use command: git checkout <branch\_name>

Eg: To move to dev branch, the command is git checkout dev

Q6: How to create and checkout a branch at the same time?

Answer: Use command: git checkout -b <branch\_name>

Q7: How to merge a branch to the other branch?

Answer : Use command: git merge dev

If you are on master branch, this will merge the dev branch changes to the master branch

Q8: What is the use of the .gitignore file?

Answer: If there are any files in the project that we do not want to track and do not want them to show up in the git status command, we can add such files to the .gitignore file.

Q9: How to see what changes we have made to a file with what is currently present in the file?

Answer: Use command git diff <file\_name>

Q10: What is GitHub?

Answer: GitHub, Inc. is an Internet hosting service for software development and version control using Git.

Q11 : What does git remote command do?

Answer: It helps to create,view and delete connections to other repositories

Q12 : What does git push command do?

Answer : It updates remote refs along with associated objects.

Eg: Once you make changes to your branch on local and want to push it to git hub, you could use this command: git push -u origin master

**Git – Questions and Answers**

Q1 : What is GIT ?

Answer: Git is a distributed version control system that tracks changes in any set of computer files, usually used for coordinating work among programmers collaboratively developing source code during software development.

Q2 : Why is GIT used?

Answer: GIT is used for Synchronous development, to increase team speed and productivity. It is also used across many industries and has become an industry standard.

Q3 : What does git init command do?

Answer: It is used to initialize a new or an empty repository to a Git repository.

Q4 : How do add a file to the staging area?

Answer: Use git add <file\_name> to add a file to a staging area.

Q5 : What does git commit command do?

Answer: It records the file(s) permanently in the version history.

Q6 : Which command is used to see the commit history?

Answer : The git log command is used to see the commit history

Q7 : What does the git status command do?

Answer: It displays the state of the working directory and the staging area.

Q8: How to add all files to the staging area?

Answer : Use the command **git add .**

Q9: How to go back to a previous commit?

Answer: Use the command git checkout <commit\_id>

**Java – Basic Questions**

Q1: What is Java?

Answer: Java is a high-level, class-based, object-oriented ,platform independent programming language

Q2: Can you give a few buzz words of Java?

Answer : Fe buzz words of Java are – Simple, Secure, Portable, Object-Oriented, Robust etc.

Q3: From which method does Java program processing start?

Answer: It starts from the main method.

Q4: How to compile a program in Java?

Answer: Use the command javac <file\_name>.java

Q5: When we compile a java program which file is generated?

Answer: When we compile a program, a .class file is generated.

Q6: How to run a Java Program?

Answer: Use command java <name\_of\_the\_class>

Q7: Can you write a simple program to print Hello World using Java?

Answer: public class MyFirstJavaProgram {

public static void main(String []args) {

System.out.println("Hello World"); // prints Hello World

}

}

Q8: What happens at compile time?

Answer: At compile time, the Java file is compiled by Java Compiler and converts the Java code into bytecode.

Q9: What is JVM?

Answer: JVM (Java Virtual Machine) is an abstract machine that enables your computer to run a Java program.

When you run the Java program, Java compiler first compiles your Java code to bytecode. Then, the JVM translates bytecode into native machine code

Q10: Why is Java platform independent?

Answer: It's because when you write Java code, it's ultimately written for JVM but not your physical machine (computer). Since JVM executes the Java bytecode which is platform-independent, Java is platform-independent.

Q11: What is JRE?

Answer: JRE (Java Runtime Environment) is a software package that provides Java class libraries, Java Virtual Machine (JVM), and other components that are required to run Java applications.

Q12: What is JDK?

Answer: JDK (Java Development Kit) is a software development kit required to develop applications in Java. When you download JDK, JRE is also downloaded with it.

In addition to JRE, JDK also contains a number of development tools (compilers, JavaDoc, Java Debugger, etc).

Q13: What are the primitive types in Java?

Answer: We have 8 primitive types in Java, they are:   
byte, short, int, long, char, float, double, and boolean.

Q14: List a few Java keywords

Answer: There are many Java keywords, some of them are for,if,else,continue,break etc.