# **Variable and Operators**

## Q1- How many types of error found in programming language?

**Ans1-**Errorsare an illegal operation which is perform by programmer due to this user unable to get output. During compilation or execution error is undetected.

There are four types of errors found in programming language-

- 1. Syntax Errors
- 2. Run-time Errors
- 3. Logical Errors
- 4. Semantic errors

## **Q2- What is Logical Errors and Semantic errors?**

**Ans2-Logical Errors**-Program is compiled and executed but unable to provide output.

```
Ex-Void main()
{
Int a=10,b=20;
if(a>b);
{
Printf("a");
}
Return 0;
}
```

**2. Semantic Errors-** This type of error occur when programmer doesn't written a meaningful statement.

```
Ex- void main()
{
```

```
int a, b, c;
a + b = c;
Printf(%d,c);
}
```

#### Q3- What are access specifier?

<u>Ans3-</u> Access Specifier- There are three types of access specifier used in programming language. Ex- Public, private and protected.

- **1- Public variables**, are variables that are visible to all classes.
- **2- Private variables**, are variables that are visible only to the class to which they belong. Variable of class are by default private.
- **3- Protected variables**, are variables that are visible only to the class to which they belong, and any subclasses.

### Q4-what is operator overloading used in C++?

<u>Ans4</u>-Operator Overloading-One operator can be used as different purpose in programming.

Ex-

\* symbol can be used as multiply and pointer.

<< and >> symbols are used as shift operator and extraction and interaction operator.

#### Q5- what is debugging?

Ans5- Debugging-debugging is the process which Identifying and removing error in program which is occur, after not successfully compiling or executing program. Following are the five steps which helps you to find error or bug.

- 1. Reproduce the problem.
- 2. With the help of more input try to get exact reason.
- 3. when bug appear note program exactly.
- 4. Based on noted program try to find the cause of the bug.
- 5. Fix the existing bug, but also check that any new bug does not occur.