

LAB EXERCISE – 7

1) Run the multiple-target assignment statement below by using C++, Java and Python. Display the variables before and after the statement and explain how it works.

```
cout << "\n a = " << a << " b = " << b << " c = " << c;
a = b = c = 94;
cout << "\n a = " << a << " b = " << b << " c = " << c;
```

2) Compare these two if statements; if (c = b) and if (c == b) in C++ and Java and explain how they work.

```
if ( c = b) cout << "\n IF true c= " << c << " b = " << b;
else cout << "\n IF else c= " << c << " b = " << b;

if ( c == b) cout << "\n IF true c= " << c << " b = " << b;
else cout << "\n IF else c= " << c << " b = " << b;
```

3) Assign a value to each variable, run this expression $a = b + (c = d / b) - 1$; in C++ and Java, and explain how it works. Convert the two expressions below to one assignment expression and run it.

```
x=y+5; t=x*z-1;
```

4) Run the code in C++ below and explain why the c value is different after the second if statement is executed. Run the code in Java and compare your results.

```
t=59; a=54; c=9;
cout << "\n before if t = " << t << " a = " << a << " c = " << c;
if ((t > a) || (c++/3)) cout << "\n in if t = " << t << " a = " << a << " c = " << c;
cout << "\n after if t = " << t << " a = " << a << " c = " << c;

t=50;
cout << "\n before if t = " << t << " a = " << a << " c = " << c;
if ((t > a) || (c++/3)) cout << "\n in if t = " << t << " a = " << a << " c = " << c;
cout << "\n after if t = " << t << " a = " << a << " c = " << c;
```