Assignment – 5

Aim: To build Java program using Jenkins.

LO Mapped: LO1, LO3

Theory:

Create java Programs:

Program-1

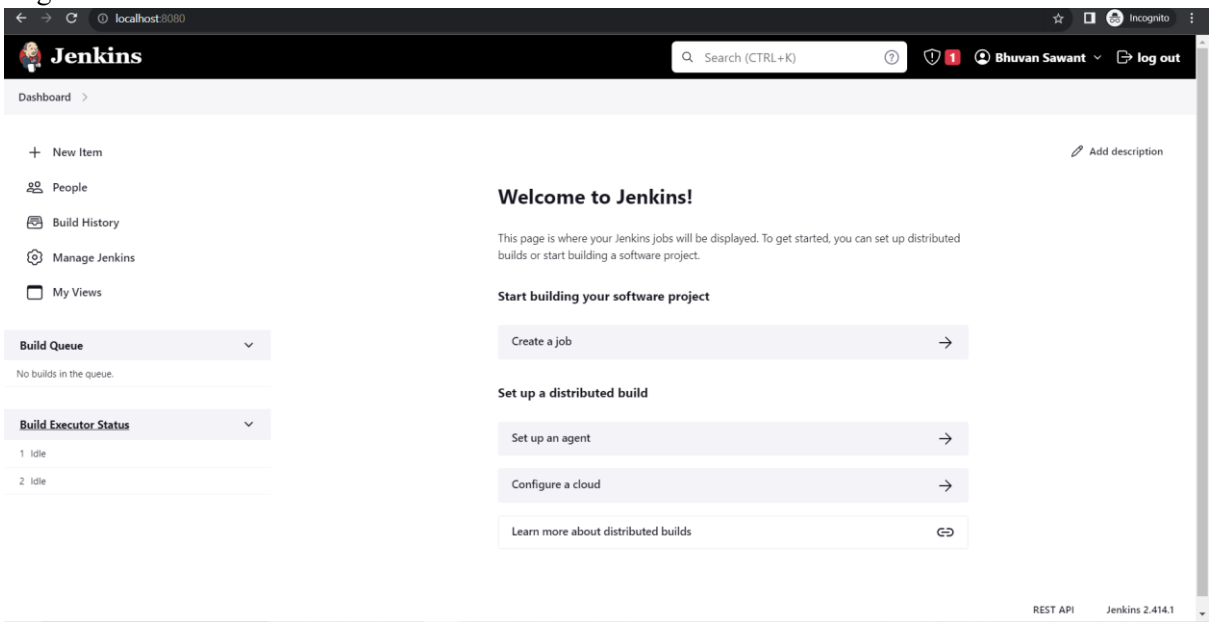
```
public class addnum {
   public static void main(String[] args){
      System.out.print("The sum of these numbers is: ");
      int n1 = 6;
      int n2 = 5;
      int n3 = 7;
      int sum = n1+n2+n3;
      System.out.println(sum);
   }
}
```

Program-2

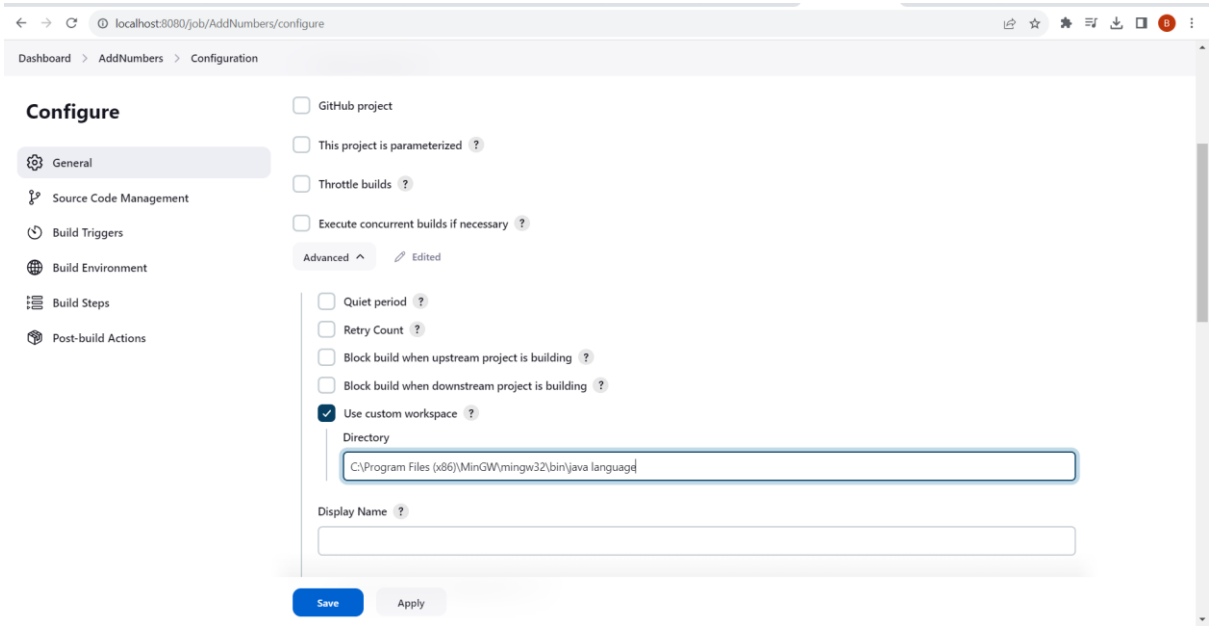
```
public class Matrix_multiplication {
   public static void main(String args[]) {
     int n = 3;
     int[][] a = { {5, 2, 3}, {2, 6, 3}, {6, 9, 1} };
     int[][] b = { {2, 7, 5}, {1, 4, 3}, {1, 2, 1} };
     int[][] c = new int[n][n];
     System.out.println("Matrix A:");
     for (int i = 0; i < n; i++) {
```

```
        for (int j = 0; j < n; j++) {
          System.out.print(a[i][j] + " ");
        }
        System.out.println();
      }
      System.out.println("Matrix B:");
      for (int i = 0; i < n; i++) {
        for (int j = 0; j < n; j++) {
          System.out.print(b[i][j] + " ");
        }
        System.out.println();
      }
      for (int i = 0; i < n; i++) {
        for (int j = 0; j < n; j++){
          for (int k = 0; k < n; k++) {
            c[i][j] = c[i][j] + a[i][k] * b[k][j];
          }
        }
      }
      System.out.println("The product of two matrices is:");
      for (int i = 0; i < n; i++) {
        for (int j = 0; j < n; j++) {
          System.out.print(c[i][j] + " ");
        }
        System.out.println();
      }
    }
}
```

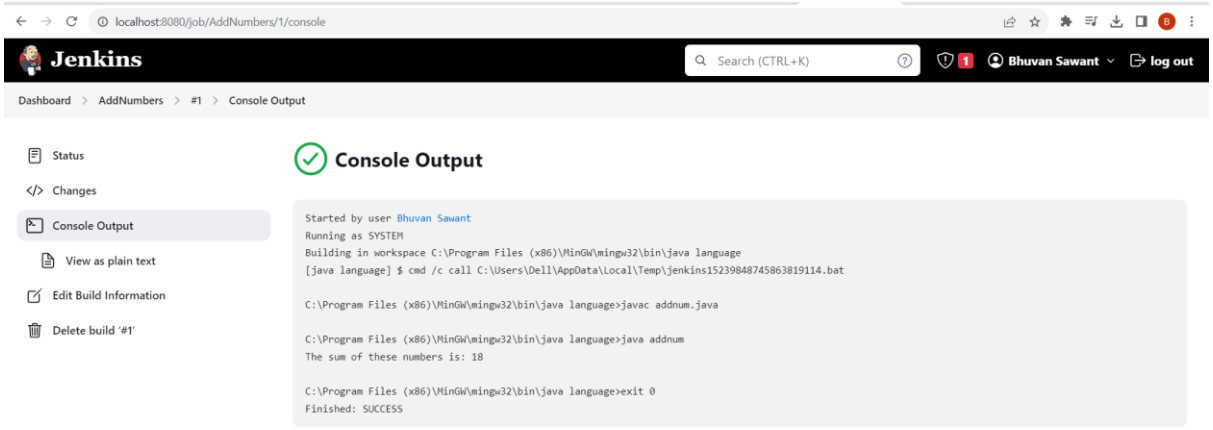
Login to Jenkins



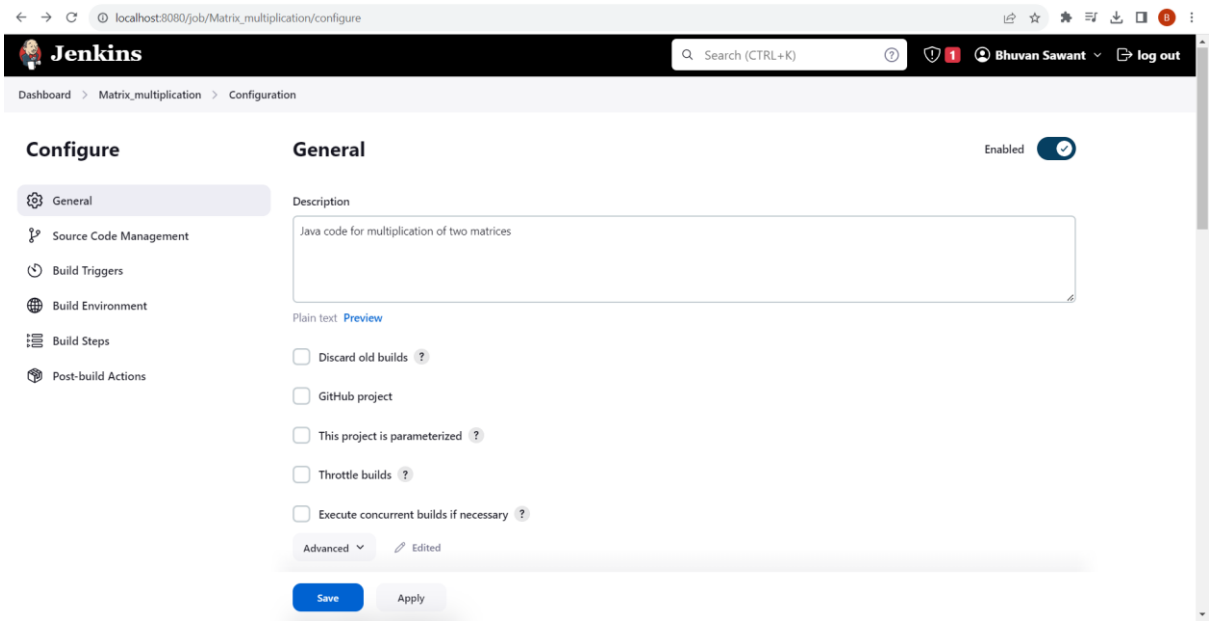
Check use custom workspace and give the path of directory where java file located.

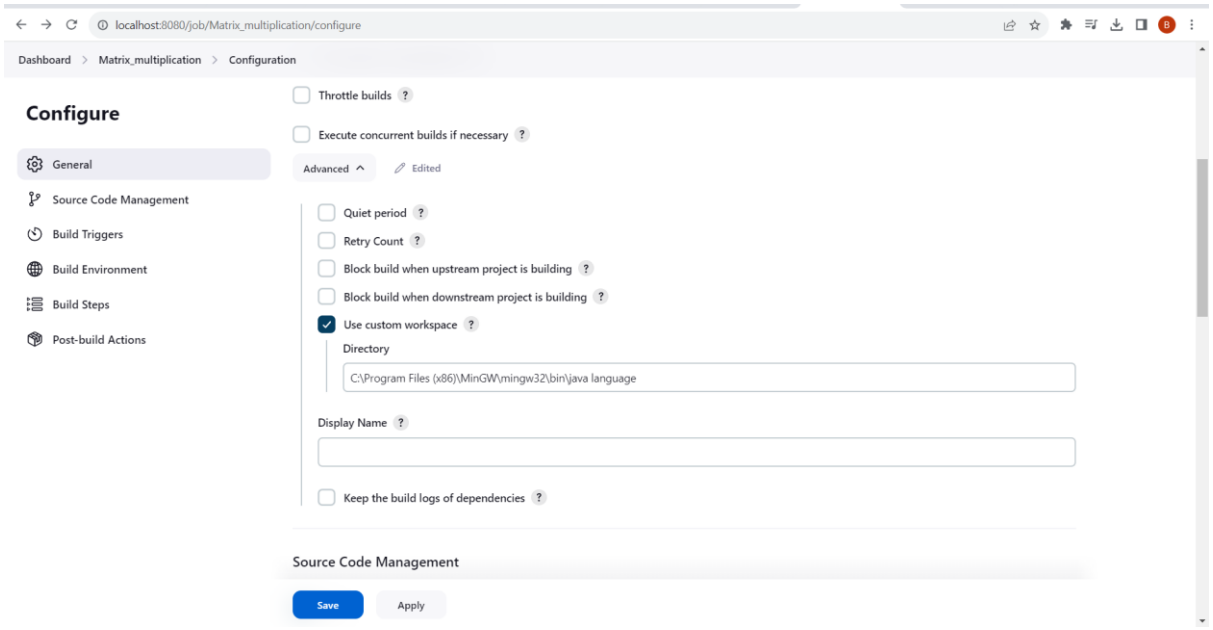


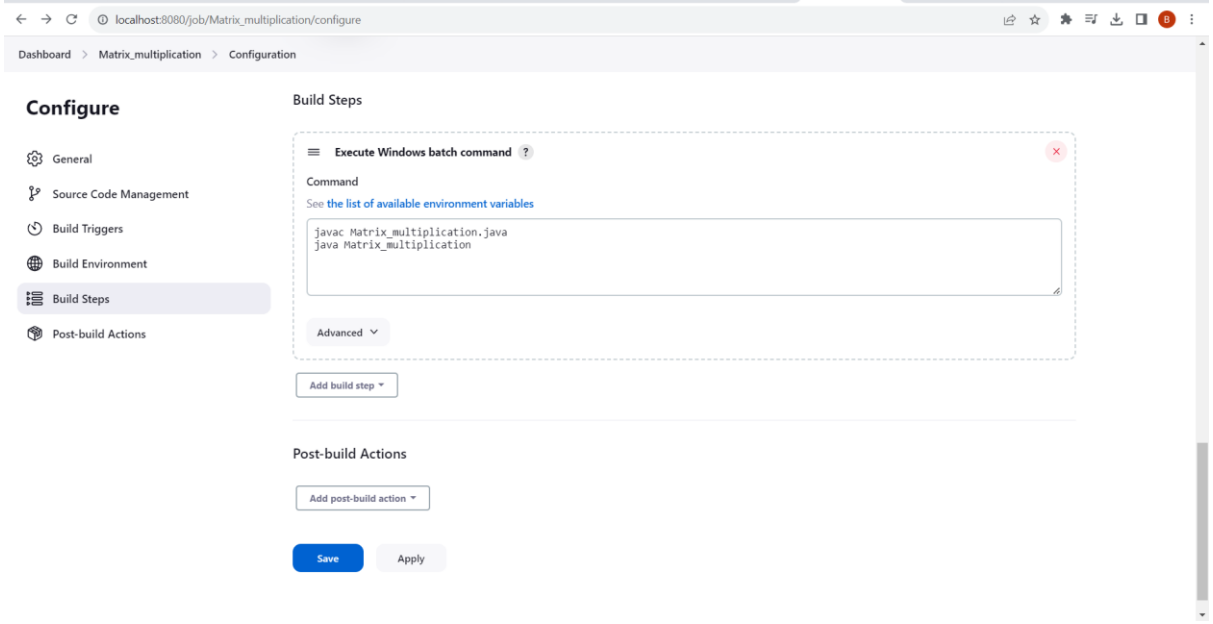
Then click on Apply and see the output of java code in console output.

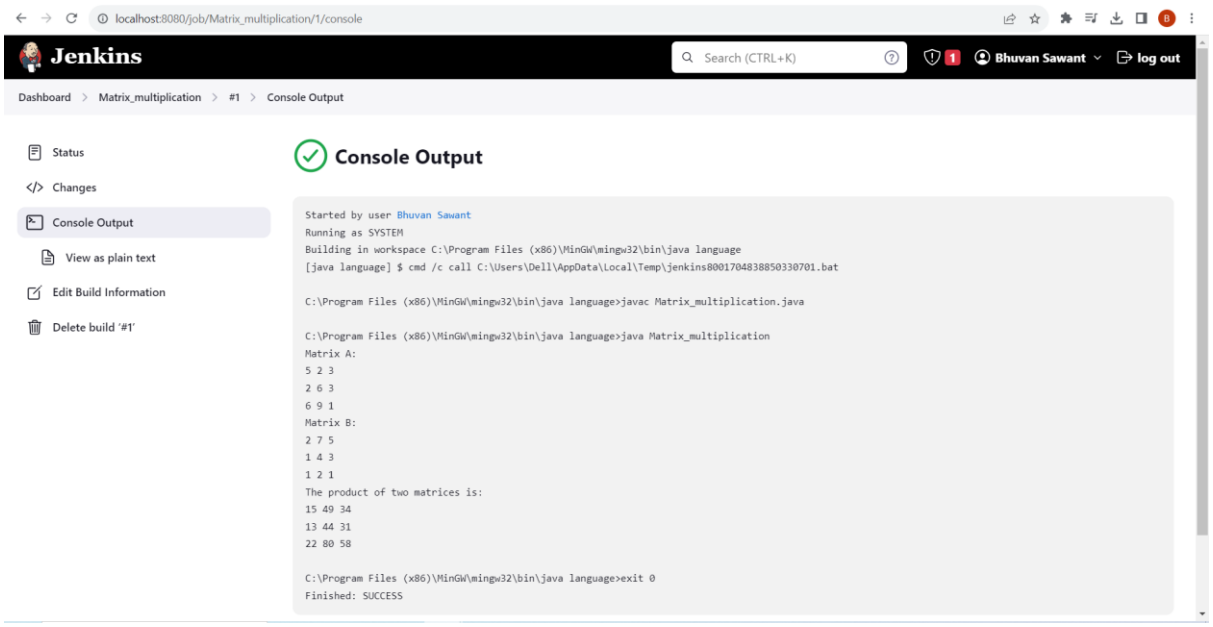


REST API Jenkins 2.414.1

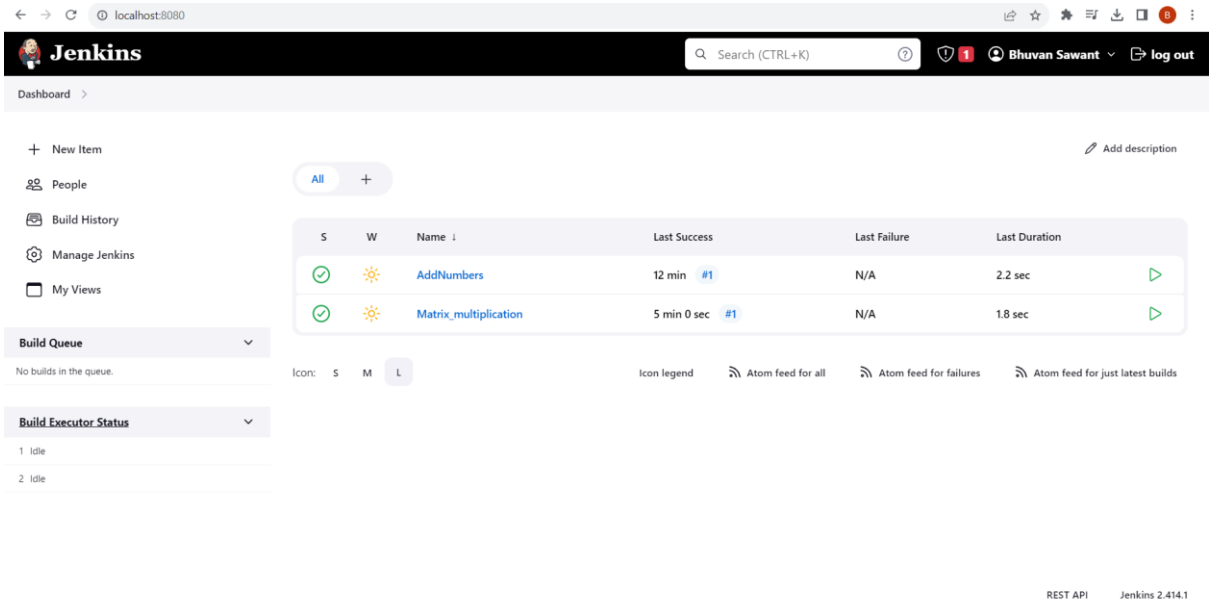



localhost:8080/job/Matrix_multiplication/configure
Dashboard > Matrix_multiplication > Configuration
Configure
General
Source Code Management
Build Triggers
Build Environment
Build Steps
Post-build Actions
Throttle builds
Execute concurrent builds if necessary
Advanced
Edited
Quiet period
Retry Count
Block build when upstream project is building
Block build when downstream project is building
Use custom workspace
Directory
C:\Program Files (x86)\MinGW\mingw32\bin\java language
Display Name
Keep the build logs of dependencies
Source Code Management
Save
Apply


localhost:8080/job/Matrix_multiplication/configure
Dashboard > Matrix_multiplication > Configuration
Configure
General
Source Code Management
Build Triggers
Build Environment
Build Steps
Post-build Actions
Build Steps
Execute Windows batch command
Command
See the list of available environment variables
javac Matrix_multiplication.java
java Matrix_multiplication
Advanced
Add build step
Post-build Actions
Add post-build action
Save
Apply



After executing code, you can see your files on dashboard.



Conclusion: In this experiment We had executed java programs on Jenkins.