Experiment:1

a) Study of class path and java runtime environment (Print Hello World)

Classpath-it is concept in java programming which defines the location of build in predefined classes and packages required for java programming.

Steps to set class path:

Step 1: locate the bin folder of java.

Step 2: note the path and open advance system settings and edit the system path variable

Step 3: add the path to bin folder of java and click ok.

Java Runtime Environment-it is the component of java responsible for execution of java programs.

Source code:

```
class HelloWorld{
        public static void main(String args[]){
                System.out.println("Hello World");
        }
}
```

```
C:\12302130501036>javac HelloWorld.java

C:\12302130501036>java HelloWorld
Hello World
```

b) WAP to Implement command line calculator.

Source code:

```
class CALCULATOR{
    public static void main(String str[]) {
```

```
        int a = Integer.parseInt(str[0]);
        int b = Integer.parseInt(str[2]);
        char c = str[1].charAt(0);

        System.out.println("Output of your operations are :
");
        System.out.println();
        switch(c){
            case '+':
            System.out.println("Addition of " + a + " and "
+ b + " is : "+(a+b));
            break;
            case '-':
            System.out.println("Subtraction of " + a + " and
" + b + " is : "+(a-b));
            break;
            case 'm':
            System.out.println("Multiplication of " + a + "
and " + b + " is : "+(a*b));
            break;
            case '/':
            System.out.println("Division of " + a + " and "
+ b + " is : "+(a/b));
            break;
            case '%':
            System.out.println("Modulus of " + a + " and " +
b + " is : "+(a%b));
```

```
            break;
            default:
            System.out.println("Invalid operator");
        }
    }
}
```

Output:

```
C:\12302130501036>javac CALCULATOR.java

C:\12302130501036>java CALCULATOR 5 + 3
Output of your operations are :

Addition of 5 and 3 is : 8
```

c) Write To Prints Fibonacci series.

Source code:

```
import java.util.Scanner;
public class FIBONACCI {
    public static void main(String[] args) {
        Scanner sc=new Scanner(System.in);
        System.out.println();
        System.out.print("Enter the value of n : ");
        int n=sc.nextInt();
        int a=0,b=1,c=0;
        System.out.println();
        System.out.print("Output of your fibonacci series is
: "+a+" "+b);
```

```
        for(int i=0;i<n-2;i++)
        {
            c=a+b;
            a=b;
            b=c;
            System.out.print(" "+c);
        }
        System.out.println();
        sc.close();
    }
}
```

Output:

```
C:\123021305010036>javac FIBONACCI.java

C:\123021305010036>java FIBONACCI

Enter the value of n : 4

Output of your fibonacci series is : 0 1 1 2
```