Practical 01

1.

```
public class practical1 {
      public static void main(String[] args) {
      System.out.println("Hello World!");
   }
}
```

2.

```
public class practical1 {
    public static void main(String[] args) {
       System.out.println("Menaka");
       System.out.println("Data Science");
   }
}
```

3.

For loop

```
public class practical1 {
   public static void main(String[] args) {
       for(int i=0;i<5;i++)
       System.out.println("Executing Loop "+i);
   }
}
```

While loop

```
public class practical1 {
```

```
    public static void main(String[] args) {
      int i=0;
      while (i<5){
       System.out.println("Executing Loop "+i);
      i++;
      }
    }
}
```

4.i)

```
public class practical1 {
    public static void main(String[] args) {
        int[] numbers = {10, 20, 30, 40, 50};
        for (int x : numbers) {
            if (x == 30) {
                break;
            }
            System.out.print(x);
            System.out.print("\n");
        }
        System.out.print("I'm out of the Loop now");
    }
}
```

Output

```
10
```

20

I’m out of the Loop now

ii)

```
public class practical1 {
   public static void main(String[] args) {
      int[] numbers = {10, 20, 30, 40, 50};
      for (int x : numbers) {
         if (x == 30) {
            continue;
         }
         System.out.print(x);
         System.out.print("\n");
      }
      System.out.print("I'm out of the Loop now");
   }
}
```

Output:

10

20

40

50

I'm out of the Loop now

5. i)

```
public class Grade {
```

```
    public static void main(String[] args) {
        char grade = 'A';
        switch (grade) {
            case 'A':
                System.out.println("Excellent!");
                break;
            case 'D':
                System.out.println("You passed");
            case 'F':
                System.out.println("Better try again");
                break;
            default:
                System.out.println("Invalid grade");
        }
        System.out.println("Your grade is " + grade);
    }
}
```

Output:

Excellent!

Your grade is A

ii)

```
public class Grade {
    public static void main(String[] args) {
        char grade = 'A';
        switch (grade) {
            case 'A':
                System.out.println("Excellent!");
```

```
            case 'D':
               System.out.println("You passed");
            case 'F':
               System.out.println("Better try again");
               break;
            default:
               System.out.println("Invalid grade");
         }
         System.out.println("Your grade is " + grade);
      }
}
```

Output

```
Excellent!
You passed
Better try again
Your grade is A
```

iii)

```
public class Grade {
   public static void main(String[] args) {
      char grade = 'A';
      if (grade == 'A') {
         System.out.println("Excellent!");
      }
      else if (grade == 'D') {
         System.out.println("You passed");
      }
      else if (grade == 'F') {
```

```
            System.out.println("Better try again");
        }
        else {
            System.out.println("Invalid grade");
        }
        System.out.println("Your grade is " + grade);
    }
}
```

6.

Corrected code

```
class TestEnhanceForLoop {
    public static void main(String[] args) {
        int[] numbers = {10, 20, 30, 40, 50};
        for (int x : numbers) {
            System.out.print(x);
            System.out.print(",");
        }
        System.out.print("\n");
        String[] names = {"James", "Larry", "Tom", "Lacy"};
        for (String name: names) {
            System.out.print(name);
            System.out.print(",");
        }
    }
}
```

Output:

10,20,30,40,50

James, Larry, Tom, Lacy