#### โปรแกรมที่ 1 Switch

```
import java.util.Scanner;
public class Switch {
  public static void main(String[] args) {
    Scanner reader = new Scanner(System.in);
    System.out.print("What\'s floor do you want to go: ");
    char floor = reader.next().charAt(0);
    switch (floor) {
      case 'G':
         System.out.println("Elevator is going to ground floor.");
         break;
      case '1':
         System.out.println("Elevator is going to first floor.");
         break;
      case '2':
         System.out.println("Elevator is going to second floor.");
         break;
      case '3':
         System.out.println("Elevator is going to third floor.");
         break;
      default:
         System.out.println("Elevator don't know where to go.");
    }
  }
}
```

# โปรแกรมที่ 2 String

```
import java.util.Scanner;
public class Constant {
  public static void main(String[] args)
  {
    String name;
    int age;
    String sport;
    Scanner reader = new Scanner(System.in);
    Scanner reader2 = new Scanner(System.in);
    System.out.print("What's your name?: ");
    name = reader.nextLine();
    System.out.print("How old are you?: ");
    age = reader2.nextInt();
    System.out.print("What's your favorite sport?: ");
    sport = reader.nextLine();
    System.out.println("Hello " + name);
    System.out.print("You was born in " + (2017 - age));
    System.out.println(" and loves to play " + sport);
  }
}
```

```
โปรแกรมที่ 3 try catch
import java.util.InputMismatchException;
import java.util.Scanner;
public class TestException1 {
  public static void main (String[] args) {
     Scanner reader = new Scanner(System.in);
    int index;
    int[] array = { 10, 20, 30, 40, 50 };
    try {
      System.out.print("Enter index: ");
      index = reader.nextInt();
       try {
         System.out.println("array[" + index + "] = " + array[index]);
       }
        catch (IndexOutOfBoundsException ex) {
         System.out.println("Exception occured: " + ex);
         System.out.println("You entered number exceeds the array size");
       }
     }
      catch (InputMismatchException ex) {
      System.out.println("Exception occurred: " + ex);
       System.out.println("You must specify an index in integer");
    }
  }
```

}

# โปรแกรมที่ 4 Do-While

```
import java.util.Scanner;
public class DoWhileLoop {
  public static void main(String[] args) {
    Scanner reader = new Scanner(System.in);
    int number;
    System.out.println("\tDetermine odd/even program");
    do {
      System.out.print("Enter odd number to exit loop: ");
      number = reader.nextInt();
      if (number % 2 == 0) {
        System.out.println("You entered " + number + ", it's even.");
      }
        else {
        System.out.println("You entered " + number + ", it's odd.");
      }
    }
   while (number \% 2 == 0);
    System.out.println("Exited loop.");
  }
}
```

#### โปรแกรมที่ 5 method

```
import java.util.Scanner;
public class MethodParameters {
  public static void main(String[] args) {
    Scanner reader = new Scanner(System.in);
    // call method
    open ();
    System.out.print("Enter music name to play: ");
    play(reader.nextLine()); // call method with 1 argument
    System.out.println("Where do you want to seek music to?");
    int min, sec;
    System.out.print("Enter minute: ");
    min = reader.nextInt();
    System.out.print("Enter second: ");
    sec = reader.nextInt();
   seekTo(sec, min); // call method with 2 arguments
  }
  // no parameter method
  public static void open () {
    System.out.println("Music player started.");
  // method with one parameter
  public static void play (String name) {
    System.out.println("Playing your music \" " + name + "\"");
  }
  // method with two parameters
  public static void seekTo (int sec, int min) {
    System.out.println("Seek music to " + min + ":" + sec);
  }
}
```

#### โปรแกรมที่ 6 array

```
public class TwoDimensionArray {
  public static void main(String[] args) {
    final int ROW = 3, COLUMN = 4;
    int score[][] = new int[ROW][COLUMN];
    int data = 5;
    // Assigning values
    for (int i = 0; i < ROW; i++) {
      for (int j = 0; j < COLUMN; j++) {
         score[i][j] = data;
         data += 5;
      }
    // Printing array
    System.out.println("Array");
    for (int i = 0; i < ROW; i++) {
      for (int j = 0; j < COLUMN; j++) {
         System.out.print("\t" + score[i][j]);
      System.out.println();
    }
    // Printing array's transpose
    System.out.println("Transpose array");
    for (int i = 0; i < COLUMN; i++) {
      for (int j = 0; j < ROW; j++) {
         System.out.print("\t" + score[j][i]);
      }
      System.out.println();
    }
    // Find a summation and an average
    int sum = 0;
    for (int i = 0; i < COLUMN; i++) {
      for (int j = 0; j < ROW; j++) {
         sum += score[j][i];
      }
    }
    System.out.println("Array's sum = " + sum);
    System.out.println("Array's avg = " + (float)(sum) / (ROW * COLUMN));
 }
}
```

```
โปรแกรมที่ 7 static
public class ObjectExample {
  public static void main(String[] args) {
    Person p1 = new Person();
    Person p2 = new Person();
    p1.name = "Mateo";
    p1.age = 20;
    p2.name = "Danny";
    p2.age = 25;
    System.out.println("Name: " + p1.name);
     System.out.println("Age: " + p1.age);
    System.out.println(StaticMember.NAME_PREFIX + " " + p1.name);
    System.out.println("\nName: " + p2.name);
    System.out.println("Age: " + p2.age);
    StaticMember.displayName(p2.name);
  }
}
class Person {
  public String name;
  public static int age;
}
class StaticMember {
  public static String NAME_PREFIX = "Mr.";
  public static void displayName (String name) {
    System.out.println(NAME_PREFIX + " " + name);
  }
}
```

#### โปรแกรมที่ 8 Else-If

```
import java.util.Scanner;
public class ElseIf {
  public static void main(String[] args) {
    Scanner sn = new Scanner(System.in);
    System.out.println("\tScore Evaluation Program");
    System.out.print("Enter your score between 0 - 100: ");
    int score = sn.nextInt();
    if (score < 0 | | score > 100) {
      System.out.println("You must enter a correct score, try again later.");
    } else {
      if (score >= 80) {
         System.out.println("Your score is excellent.");
         System.out.println("You grant grade S.");
      } else if (score >= 60) {
         System.out.println("Your score is good.");
         System.out.println("You grant grade A.");
      } else if (score >= 40) {
         System.out.println("Your score is fair.");
         System.out.println("You grant grade B.");
      } else {
         System.out.println("Your score is poor.");
         System.out.println("You grant grade C.");
      }
    }
  }
}
```

### โปรแกรมที่ 9 while loop

```
import java.util.Scanner;
public class ClassAverage {
        public static void main(String[] args) {
                Scanner input = new Scanner(System.in);
                System.out.println("Welcome to the grade book for");
                System.out.println("Java Programming!");
                int total;
                int gradeCounter;
                int grade;
                int average;
                total = 0;
                gradeCounter = 1;
                while (gradeCounter <= 10) {
                        System.out.print("Enter grade: ");
                        grade = input.nextInt();
                        total = total + grade;
                        gradeCounter = gradeCounter + 1;
                }
                average = total / 10;
                System.out.printf("\nTotal of all 10 grades is %d\n", total);
                System.out.printf("Class average is %d\n", average);
       }
}
```

# โปรแกรมที่ 10 pyramid

```
public class mim33 {
public static void main(String[] args) {
  int mim,m;
  for (mim=1; mim <= 3; mim++) {
        for (m=3; m >= mim; m--)
          System.out.print(" ");
        for (m=1; m <= mim; m++)
          System.out.print("*");
        for (m=2; m <= mim; m++)
          System.out.print("*");
        System.out.println();
  for (mim=1; mim <= 2; mim++) {
        for (m=1; m <= mim+1; m++)
          System.out.print(" ");
        for (m=mim; m <= 2; m++)
          System.out.print("*");
        for (m=mim; m <= 1; m++)
          System.out.print("*");
        System.out.println();
 }
}
}
```