

1. Source code dari file .java akan diubah menjadi bytecode
2. Class merupakan template/contoh untuk membuat sebuah objek pada pemograman komputer, sedangkan object pada pemograman adalah sebuah sesuatu yang akan kita program.

3.

```
import java.util.Scanner;

class Bulan {
    int input;

    void show_bulan() {
        String bulan = "";
        if (input == 1) {
            bulan = "Januari";
        } else if (input == 2) {
            bulan = "Februari";
        } else if (input == 3) {
            bulan = "Maret";
        } else if (input == 4) {
            bulan = "April";
        } else if (input == 5) {
            bulan = "Mei";
        } else if (input == 6) {
            bulan = "Juni";
        } else if (input == 7) {
            bulan = "Juli";
        } else if (input == 8) {
            bulan = "Agustus";
        } else if (input == 9) {
            bulan = "September";
        } else if (input == 10) {
            bulan = "Oktober";
        } else if (input == 11) {
            bulan = "November";
        } else if (input == 12) {
            bulan = "Desember";
        }
        System.out.println("Bulan ke " + input + " adalah : " + bulan);
    }

    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        Bulan cek = new Bulan();
        System.out.print("Masukan nomor bulan : ");
        cek.input = input.nextInt();
        cek.show_bulan();
    }
}
```

4.

```
import java.util.Scanner;

class Segitiga {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.print("Masukan angka : ");
        int n = input.nextInt();
        int number = 0;
        for (int i=0;i<n;i++) {
            number++;
            for (int j=0;j<=i;j++) {
                System.out.print(number + " ");
            }
            System.out.print("\n");
        }
    }
}
```

5.

```
import java.util.Scanner;

class Matriks {
    Scanner input = new Scanner(System.in);
    void input_matrix(int matrix[][]) {
        for (int i=0;i<2;i++) {
            for (int j=0;j<2;j++) {
                System.out.print("matriks kolom ke " + i+1 + " Baris ke " + j+1 + " :
" );
                matrix[i][j] = input.nextInt();
            }
        }
    }
    int[][] tambah_matrix(int a[][],int b[][]) {
        int result[][] = new int[2][2];
        for (int i=0;i<2;i++) {
            for (int j=0;j<2;j++) {
                result[i][j] = a[i][j] + b[i][j];
            }
        }
        return result;
    }
    void show_matrix(int matrix[][]) {
        for (int i=0;i<2;i++) {
            for (int j=0;j<2;j++) {
                System.out.print(matrix[i][j] + " ");
            }
            System.out.print("\n");
        }
    }
    public static void main(String[] args) {
        Matriks mat1 = new Matriks();
        int a[][] = new int[2][2];
        int b[][] = new int[2][2];
        mat1.input_matrix(a);
        mat1.show_matrix(a);
        mat1.input_matrix(b);
        mat1.show_matrix(b);
        System.out.println("Hasil pertambahan matrix : ");
        mat1.show_matrix(mat1.tambah_matrix(a,b));
    }
}
```

6.

```
import java.util.Scanner;

class NilaiMK {
    String namaMK;
    double uts;
    double uas;
    double tubes;

    double hitungNilai() {
        return (0.3*uts)+(0.4*uas)+(0.3*tubes);
    }

    String tentukanRange(double score) {
        String ret = "0";
        if (score >= 80 && score <= 100) {
            ret = "A";
        } else if (score >= 70 && score < 80) {
            ret = "AB";
        } else if (score >= 65 && score < 70) {
            ret = "B";
        } else if (score >= 60 && score < 65) {
            ret = "BC";
        } else if (score >= 50 && score < 60) {
            ret = "C";
        } else if (score >= 40 && score < 50) {
            ret = "D";
        } else {
            ret = "E";
        }
        return ret;
    }

    public static void main(String[] args) {
        double nilai_akhir = 0.0;
        NilaiMK mk1 = new NilaiMK();
        Scanner input = new Scanner(System.in);
        System.out.print("Masukan nama MK : ");
        mk1.namaMK = input.next();
        System.out.print("Masukan nilai UTS : ");
        mk1.uts = input.nextDouble();
        System.out.print("Masukan nilai UAS : ");
        mk1.uas = input.nextDouble();
        System.out.print("Masukan nilai tubes : ");
        mk1.tubes = input.nextDouble();
        System.out.println("Mata Kuliah " + mk1.namaMK);
        System.out.println("Nilai UTS : " + mk1.uts + " (" + mk1.tentukanRange(mk1.uts)+
") ");
        System.out.println("Nilai UAS : " + mk1.uas + " (" + mk1.tentukanRange(mk1.uas)+
") ");
        System.out.println("Nilai Tubes : " + mk1.tubes + " (" +
mk1.tentukanRange(mk1.tubes)+ ") ");
        nilai_akhir = mk1.hitungNilai();
        System.out.println("Nilai Akhir : " + nilai_akhir + " (" +
mk1.tentukanRange(nilai_akhir)+ ") ");
        //System.out.println(mk1.tentukanRange(95));
        input.close();
    }
}
```