

Nama: Fauzan Zulfa Muhammad (103022100032)

① Import java.util.Scanner

```
public class soal1 {  
    public static void main(String[] args) {  
        Scanner input = new Scanner(System.in);  
  
        int a = input.nextInt();  
        int b = input.nextInt();  
  
        System.out.printf("%0.3F", "0.3F", hitung1(a,b), hitung2(a,b));  
    }  
}
```

$$\frac{3x}{4y} = \frac{2^2}{6y}$$
$$= \frac{3x^3}{24y} = \frac{2^2}{2}$$
$$= \frac{9x}{2} = 2^2$$

```
public static double hitung1(int a, int b) {  
    return Math.sqrt(9 * a / 2.0);  
}
```

```
public static double hitung2(int a, int b) {  
    return Math.sqrt(9 * b / 2.0);  
}
```

}

② Import java.util.Scanner;

```
public class soal2 {
```

```
    public static void main(String[] args) {
```

```
        Scanner input = new Scanner(System.in);
```

```
        System.out.println("Jumlah Bus (input.nextInt(), input.nextInt()) + " bus");
```

```
    }
```

```
    public static Integer jumlahBus(int penumpang, int kapasitas) {
```

```
        int result = penumpang / kapasitas;
```

```
        if (penumpang % kapasitas != 0) {  
            result++;
```

```
        }
```

```
        return result;
```

```
    }
```

```
}
```


③ Import java.util.Scanner

```
public class soal3 {  
    public static void main(String[] args) {  
        Scanner input = new Scanner(System.in);  
  
        double ipk = input.nextDouble();  
        int masaStudi = input.nextInt();  
        boolean publikasi = input.nextBoolean();  
  
        String result = "Invalid Input";  
  
        if (cumlaude(ipk, masaStudi, publikasi)) {  
            result = "Cumlaude";  
        } else if (sangatMemuaskan(ipk, masaStudi, publikasi)) {  
            result = "Sangat Memuaskan";  
        } else if (memuaskan(ipk, masaStudi, publikasi)) {  
            result = "Memuaskan";  
        }  
  
        System.out.println(result);  
    }  
  
    public static boolean cumlaude(double a, int b, boolean c) {  
        return (a >= 3.51 && a <= 4.00 && b <= 8 && c);  
    }  
  
    public static boolean sangatMemuaskan(double a, int b, boolean c) {  
        return (a >= 2.76 && a <= 4.00 && b <= 10);  
    }  
  
    public static boolean memuaskan(double a, int b, boolean c) {  
        return (a >= 2.00 && a <= 2.75 && b <= 10);  
    }  
}
```