```
// Task 1

a. int hungry ()
b. 2AB is invalid (the variable starts with a number)
c. 312.2 is invalid ( The variable contains number in the first letter and also a
float )
d. int MOBILE (It is valid)
e. "Äns" is invalid (Variable can not start with Special Character)
f. int $30 (Define $30 as an interger variable)
g. Yes/No in invalid (There is Special Character in between Yes & No)
h. student-id is invalid (There is a special character in between student and id)
i. A+3 is invalid (There is a "+" sign in between A and 3. That Is invalid in Java)
j. 'X' is Invalid (variable can not start with special character)
k. return is Invalid (There are some keywords in java that can not be use as a
variable)



//Task 2.1
public class Task2_1  {
    public static void main(String[] args) {

        int num1 = 32;

        System.out.println("The value of my number is " + num1);
    }
}



//Task 2.2
public class Task2_2  {
    public static void main(String[] args) {

        int num1 = 32;
        int num2 = 8;
      int addition = num1 + num2 ;
      System.out.println ("The Sum of the two number is " + addition);
    }
}



//Task 2.3
public class Task2_3  {
    public static void main(String[] args) {

        int num1 = 32;
        int num2 = 8;
      int product = num1 * num2 ;
        System.out.println("The product of two integer is " + product);
      double division = num1 / num2 ;
        System.out.println("The division of two integer is " + division);
    }
}



//Task 2.4
```

```
public class Task2_4  {
    public static void main(String[] args) {
      double number1 = 32;
      System.out.println("The Sum of the two number is " + number1);
      double number2 = 8;
        double addition1 = number1 + number2 ;
        System.out.println("The Sum of the two number is " + addition1);
        double product1 = number1 * number2 ;
          System.out.println("The product of two integer is " + product1);
        double division1 = number1 / number2 ;
        System.out.println("The product of two integer is " + division1);
    }
}



//Task 2.5
public class Task2_5 {
    public static void main(String[] args) {
 double num_1 = 32;
      System.out.println("The Value of the two number is " + num_1);
       int num_2 = 8 ;
        double addition_1 = num_1 + num_2 ;
        System.out.println("The Sum of the two number is " + addition_1);
        double product_1 = num_1 * num_2 ;
          System.out.println("The product of two integer is " + product_1);
        double division_1 = num_1 / num_2 ;
        System.out.println("The product of two integer is " + division_1);
  }
}



//Task 2.6
public class Task2_6 {
    public static void main(String[] args) {
      String number_1 = " 32 ";
      System.out.println("The Value of the two number is " + number_1);
       String number_2 = " 8 " ;
        String addition_2 = number_1 + number_2 ;
        System.out.println("The Addition of the two number is " + addition_2);

      String number_3 = " 28 " ;
          int number_4 = 7 ;
          String add_1 = number_3 + number_4 ;
          System.out.println("The Addition of the two number is " + add_1);


          String add_2 = number_4 + number_3 ;
          System.out.println("The Addition of the two number is " + add_2);
  }
}



//Task 3
public class Task3 {
    public static void main(String[] args) {
```

```
      int radius = 4 ;
      double circumference = 2 * Math.PI * radius ;
      System.out.println("The Circumference of the circle is " + circumference);
      double area = Math.PI * radius * radius ;
      System.out.println("The Area of the circle is " + area);
    }
}



//Task 4
public class Task4 {
    public static void main(String[] args) {
      int num1 = 4321 ;
      int result = num1 % 100 ;
      System.out.println("The last two digits of the number are " + result);
    }
}



//Task 5
public class Task5 {
    public static void main(String[] args) {
      int num1 = 1000 ;
      double meter = num1 * 0.0254 ;
      System.out.println(num1 + " inch is " + meter + " meters");
    }
}



//Task 6_a
public class Task6_a {
    public static void main(String[] args) {
      int num1 = 1000 ;
      int num2 = 500 ;
      int num3;
      num3 = num1 ;
      num1 = num2 ;
      num2 = num3 ;
      System.out.println(" num1 is " + num1);
      System.out.println( " num2 is "  +num2);
    }
}



//Task 6_b
public class Task6_b {
    public static void main(String[] args) {
      int num1 = 1000 ;
      int num2 = 500 ;
      num1 = num1 + num2 ;
      num2 = num1 - num2 ;
      num1 = num1 - num2 ;
       System.out.println(" num1 is " + num1);
       System.out.println( " num2 is "  +num2);
    }
```

```
}



  //Task 7
public class Task7 {
    public static void main(String[] args) {
     int minute = 3456789 ;
    int year = minute / (60 * 24 * 365) ;
    int r_year = minute % (60 * 24 * 365) ;
    int day = r_year / (60 * 24);
    System.out.println(minute + " minutes is approximately " + year + " years and "
+ day + " days");
    }
}



  //Task 8
public class Task8 {
    public static void main(String[] args) {

    int a = 2;
    int b = 5;
    int c = 8;
    int d;

    d = (2*b*((c-a)/3))+7;
    System.out.println("The Answer is " + d);
    }
}



  //Task 9
public class Task9 {
    public static void main(String[] args) {
    int n = 5;
      int n1 = n * 1 ;
      int n2 = n * 2 ;
      int n3 = n * 3 ;
      int n4 = n * 4 ;
      int n5 = n * 5 ;
      int n6 = n * 6 ;
      int n7 = n * 7 ;
      int n8 = n * 8 ;
      int n9 = n * 9 ;
      int n10 = n * 10;
    System.out.println(n +" x 1 = " + n1);
    System.out.println(n +" x 2 = " + n2);
    System.out.println(n +" x 3 = " + n3);
    System.out.println(n +" x 4 = " + n4);
    System.out.println(n +" x 5 = " + n5);
    System.out.println(n +" x 6 = " + n6);
    System.out.println(n +" x 7 = " + n7);
    System.out.println(n +" x 8 = " + n8);
    System.out.println(n +" x 9 = " + n9);
    System.out.println(n +" x 10 = " + n10);
  }
```

```
}



//Task 10
public class Task10 {
    public static void main(String[] args) {
        int n = 100;
        int a = 1;
        int L = 100;

        int sum = (n/2)*(a + L);


        System.out.println("The sum of the first 100 positive numbers is " + sum);
   }
}



//Task 11
public class Task11 {
    public static void main(String[] args) {
    double a = 4.5 ;
    double b = 9.5 ;
    double c = Math.sqrt(a*a + b*b);
    double sinA = a / c ;
      double cosA = b / c ;
      double sinB = b /c ;
      double cosB = a / c ;
      System.out.println("sinA = " + sinA);
      System.out.println("cosA = " + cosA);
      System.out.println("sinB = " + sinB);
      System.out.println("cosB = " + cosB);
   }
}



//Task 12
public class Task12 {
    public static void main(String[] args) {
    int num1 = 24301176;
      int rem1 = num1 % 10 ;
      int div1 = num1 / 10 ;
      int rem2 = div1 % 10 ;
      System.out.println(rem1);
      System.out.println(rem2);
   }
}



 //Task 13
public class Task13 {
    public static void main(String[] args) {
      int hour = 5 ;
      int minute = 56 ;
      int second = 23 ;
```

```
     double hour_r = hour + (minute / 60.0) + (second / 3600.0) ;
      float student_id = 24301176 ;
      float displacement_meter = student_id % 10000;


      double velocity_kmph = displacement_meter / (hour_r*1000);
        System.out.println(velocity_kmph);

      double velocity_mileph = displacement_meter / (hour_r*1609);
        System.out.println(velocity_mileph);
    }
}



//Task 14
public class Task14 {
    public static void main(String[] args) {
      int a = 8 ;
        int b = 3 ;
      double side = Math.sqrt((( a / 2 )* ( a / 2 )) + b * b) ;
      double area = ((3* Math.sqrt(3))/2) * side * side ;
      double circumference =  6 * side ;
      System.out.println("The area of the Hexagon " + area);
      System.out.println("The circumference of the Hexagon " + circumference);
    }
}
```