```
class Q1Hello{
 public static void main(String[] args) {
  System.out.println("Hello");
  System.out.println("Shubham Kolte");
}
}
 Hello
 Shubham Kolte
class Q2Sum_of_Two_Numbers{
  public static void main(String[] args) {
    int a = 44;
    int b = 96;
    int c = a+b;
    System.out.println(a + " + " + b + " = " + c);
 }
}
 44 + 96 = 140
class Q3Divide_Two_Numbers{
public static void main(String[] args) {
  int a=30;
  int b=3;
  int c = a/b;
  System.out.println(a + " / " + b + " = " + c);
}
}
```

```
class Q4Perform_Arithmetic_Operations{
 public static void main(String[] args) {
 int a = -4 + 7 * 6;
  int b = (34 + 5) \% 9;
  int c = 10 + -2 * 5 / 8;
  int d = 5 + 11 / 3 * 2 - 8 % 3;
  System. out. println("-4+7*6="+a);
  System. out. println("(34 + 5) \% 9 = "+b);
  System. out. println("10 + - 2 * 5 / 8 = "+c);
  System. out. println("5 + 11 / 3 * 2 - 8 % 3 = "+d);
}
}
     - 4 + 7 * 6 = 38
     (34 + 5) \% 9 = 3
     10 + - 2 * 5 / 8 = 9
          11 / 3 * 2 - 8 % 3 = 9
class Q5Multiply_Two_Numbers{
 public static void main(String[] args) {
  int a = 40;
  int b= 5;
  int c=a*b;
  System.out.println(a + " * " + b + " = " + c);
}
}
```

```
class Q6Basic_Arithmetic_Operations {
 public static void main(String[] args) {
  int a = 145;
  int b = 243;
  int c = 200 + 24;
  int d = 125 - 24;
  int e = 123 * 24;
  int f = 1251 / 24;
  int g = 1259 % 24;
  System.out.println(a + " + " + b + " = " + c);
  System.out.println(a + " - " + b + " = " + d);
  System.out.println(a + " x " + b + " = " + e);
  System.out.println(a + " / " + b + " = " + f);
  System.out.println(a + " % " + b + " = " + g);
 }
}
  145 - 243 = 101
  145 \times 243 = 2952
  145 / 243 = 52
  145 % 243 = 11
class Q7Multiplication_Table{
 public static void main(String[] args) {
  int a = 4;
```

```
for(int i = 1; i <= 10; i++){
    System.out.println(a + " x " + i + " = " + (a * i));
}
}</pre>
```

```
4 x 1 = 4

4 x 2 = 8

4 x 3 = 12

4 x 4 = 16

4 x 5 = 20

4 x 6 = 24

4 x 7 = 28

4 x 8 = 32

4 x 9 = 36

4 x 10 = 40
```

```
class Q8Swap_Two_Numbers{
public static void main(String[] args) {
  int a = 10;
  int b = 20;
   System.out.println("Before Swap\n" + " a = " + a + ", b = " + b);
  int temp;
  temp=a;
  a=b;
  b=temp;
  System.out.println("Before Swap\n" + " a = " + a + ", b = " + b);
}
```

```
Before Swap

a = 10, b = 20

Before Swap

a = 20, b = 10
```

```
class Q9Area_of_circle {
  public static void main(String[] args) {
    int rad = 10;
    float area = 3.14159f * rad * rad;
    System.out.println("Area of circle is :" + (float) area);
  }
}
```

Area of circle is :314.159

```
class Q10EvenOdd {
  public static void main(String[] args) {
    int a =14;
  if (a % 2 == 0) {
        System.out.println("The number " + a + " is Even.");
    } else {
        System.out.println("The number " + a + " is Odd.");
    }
}
```

The number 14 is Even.

```
class Q11Largest_of_Three_Numbers{
public static void main(String[] args) {
   int firstNumber = 10;
   int secondNumber = 32;
   int thirdNumber = 45;
   int largestNumber = firstNumber;
   if (secondNumber > largestNumber) {
     largestNumber = secondNumber;
   }
   if (thirdNumber > largestNumber) {
     largestNumber = thirdNumber;
   }
   System.out.println("The largest number is " + largestNumber + ".");
}
}
```

The largest number is 45.

```
class Q12Reverse_Number{
public static void main(String[] args) {
```

```
int number = 12345;
int reversed = 0;

while(number != 0) {
    int digit = number % 10;
    reversed = reversed * 10 + digit;
    number /= 10;
}

System.out.println("Reversed Number: " + reversed);
}
```

Reversed Number: 54321

```
class Q13Average_of_Three_Num{
  public static void main(String[] args) {
    int num1 = 20;
    int num2 = 40;
    int num3 = 60;

    double average = (num1 + num2 + num3) / 3.0;

    System.out.println("The average is: " + average);
}
```

```
}
```

The average is: 40.0

```
class Q14Fibonacci_Series{
 public static void main(String[] args){
    int n = 5;
    int first = 0;
    int second = 1;
    System.out.println("Fibonacci Series (" + n + " terms):");
    for (int i = 1; i \le n; i++) {
       System.out.print(first + " ");
       int next = first + second;
       first = second;
       second = next;
}
}
}
```

Fibonacci Series (5 terms): 0 1 1 2 3

```
class Q15Factorial {
  public static void main(String[] args) {
```

```
int number = 5;
long factorial = 1;

for (int i = 1; i <= number; i++) {
    factorial = factorial * i;
}

System.out.println("Factorial of " + number + " is " + factorial);
}

**Terminated > QTSTactorial pava Application of 5 is 120
```

```
class Q16PrimeNumber {
  public static void main(String[] args) {
    int number = 18;
    boolean isPrime = true;

  if (number <= 1) {
      isPrime = false;
    } else {
      for (int i = 2; i <= number / 2; i++) {
        if (number % i == 0) {
            isPrime = false;
            break;
      }
    }
  }
}</pre>
```

```
if (isPrime) {
        System.out.println("The number " + number + " is Prime");
    } else {
        System.out.println("The number " + number + " is not Prime");
    }
}
```

The number 18 is not Prime

```
class Q17First_N_NaturalNumbers {
  public static void main(String[] args) {
    int N = 9;

    System.out.print("First " + N + " natural numbers: ");
    for (int i = 1; i <= N; i++) {
        System.out.print(i + " ");
    }
}</pre>
```

First 9 natural numbers: 1 2 3 4 5 6 7 8 9

```
class Q18TemperatureConverter {
  public static void main(String[] args) {
    double celsius = 19.0;
    double fahrenheit = (celsius * 9 / 5) + 32;
```

```
System.out.println(celsius + "°C is equal to " + fahrenheit + "°F");
  }
}
19.0°C is equal to 66.2°F
class Q19Power {
  public static void main(String[] args) {
    int base = 3;
    int exponent = 5;
    int result = 1;
    for (int i = 1; i <= exponent; i++) {
      result *= base;
    }
    System.out.println(base + " raised to the power " + exponent + " is " + result);
  }
}
3 raised to the power 5 is 243
class Q20CountDigits {
  public static void main(String[] args) {
    int number = 12345;
    int count = 0;
    while (number != 0) {
      number /= 10;
      count++;
```

```
}
System.out.println("The number 123456 has " + count + " digits");
}
```

The number 123456 has 5 digits