

Java



Prepared by:

Name of Student : Chaitanya Dalvi

Roll No: 19

Batch: 2023-27

Dept. of CSE

Name of Student: Chaitanya Dalvi

Roll Number: 19

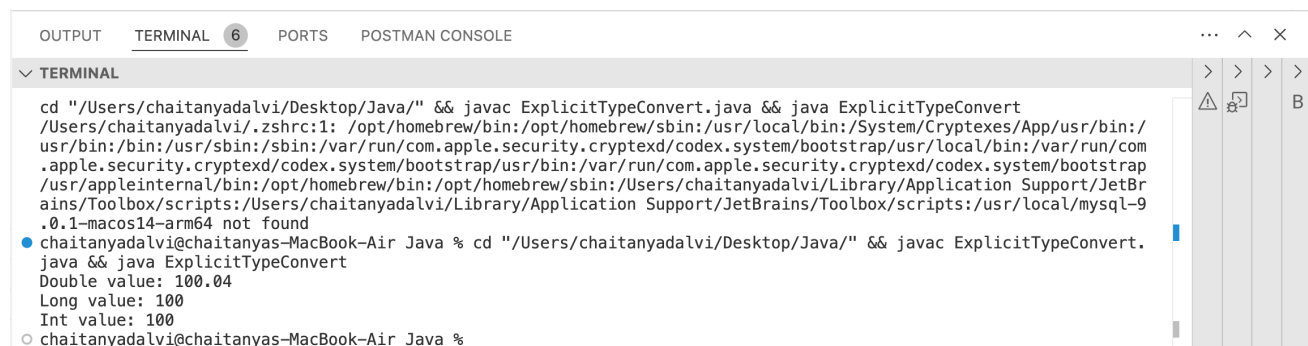
Experiment No: 1

Title: WAP to demonstrate implicit type conversion and explicit type conversion.

Code:

```
public class ExplicitTypeConvert {
    public static void main(String args[]) {
        double d = 100.04;
        long l = (long) d;
        int i = (int) l;
        System.out.println("Double value: " + d);
        System.out.println("Long value: " + l);
        System.out.println("Int value: " + i);
    }
}
```

Output: (screenshot)



```
cd "/Users/chaitanyadalvi/Desktop/Java/" && javac ExplicitTypeConvert.java && java ExplicitTypeConvert
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac ExplicitTypeConvert.java && java ExplicitTypeConvert
Double value: 100.04
Long value: 100
Int value: 100
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 2

Title:WAP to find whether the inputted number is even or odd.

Code:

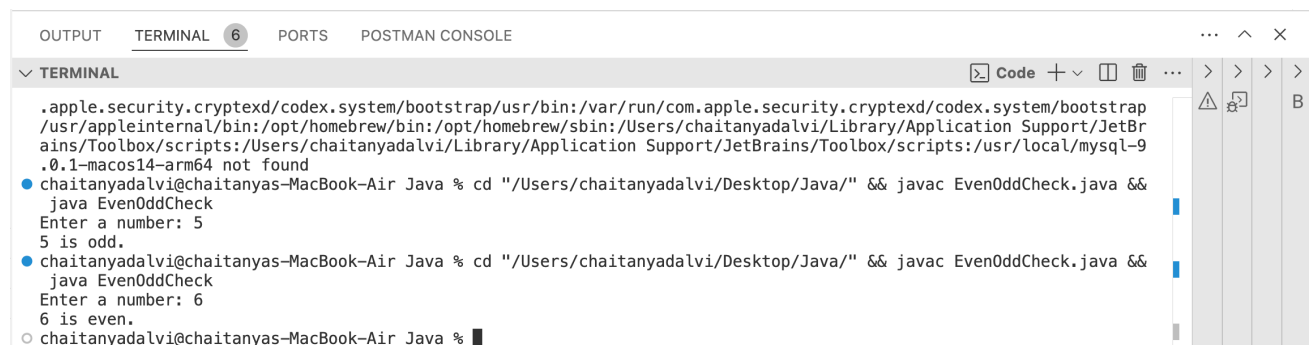
```
import java.util.Scanner;

public class EvenOddCheck {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        System.out.print("Enter a number: ");
        int number = input.nextInt();

        if (number % 2 == 0) {
            System.out.println(number + " is even.");
        } else {
            System.out.println(number + " is odd.");
        }
        input.close();
    }
}
```

Output: (screenshot)



```
OUTPUT  TERMINAL 6  PORTS  POSTMAN CONSOLE
▼ TERMINAL
.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap
/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBr
ains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9
.0.1-macos14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac EvenOddCheck.java &&
  java EvenOddCheck
  Enter a number: 5
  5 is odd.
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac EvenOddCheck.java &&
  java EvenOddCheck
  Enter a number: 6
  6 is even.
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 3

Title: WAP to find greater among two numbers using conditional operator.Code:

```
import java.util.Scanner;

public class GreaterNumber {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the first number: ");
        int num1 = scanner.nextInt();

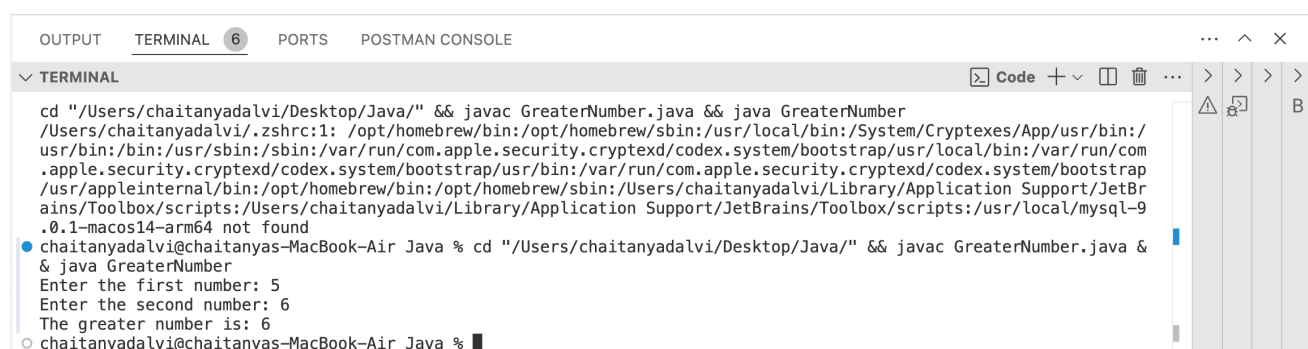
        System.out.print("Enter the second number: ");
        int num2 = scanner.nextInt();

        int greater = (num1 > num2) ? num1 : num2;

        System.out.println("The greater number is: " + greater);

        scanner.close();
    }
}
```

Output: (screenshot)



```
cd "/Users/chaitanyadalvi/Desktop/Java/" && javac GreaterNumber.java && java GreaterNumber
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/
usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com
.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap
/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBr
ains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9
.0.1-macos14-arm64 not found
chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac GreaterNumber.java &
& java GreaterNumber
Enter the first number: 5
Enter the second number: 6
The greater number is: 6
chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 4

Title: WAP to find greatest among three numbers using if else.

Code:

```
import java.util.Scanner;

public class GreatestNumber {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the first number: ");
        int num1 = scanner.nextInt();

        System.out.print("Enter the second number: ");
        int num2 = scanner.nextInt();

        System.out.print("Enter the third number: ");
        int num3 = scanner.nextInt();

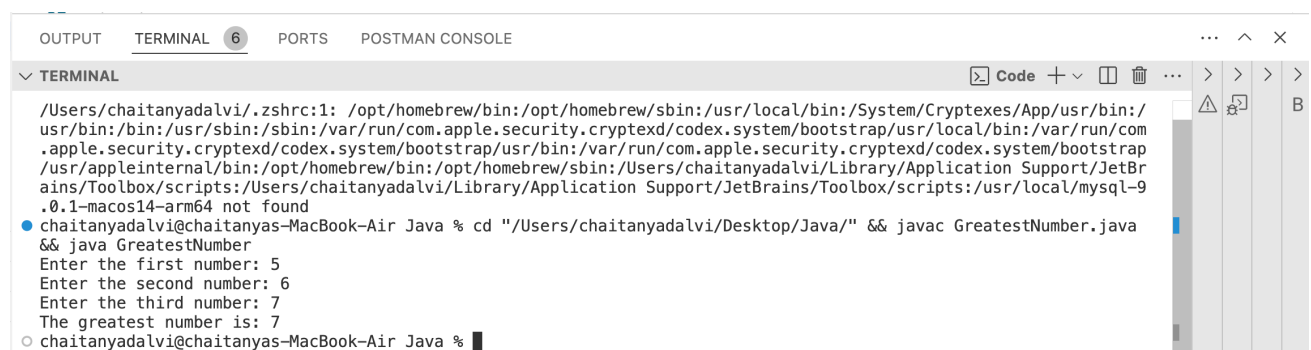
        int greatest;

        if (num1 >= num2 && num1 >= num3) {
            greatest = num1;
        } else if (num2 >= num1 && num2 >= num3) {
            greatest = num2;
        } else {
            greatest = num3;
        }

        System.out.println("The greatest number is: " + greatest);

        scanner.close();
    }
}
```

Output: (screenshot)



The screenshot shows a terminal window with the following content:

```
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac GreatestNumber.java && java GreatestNumber
Enter the first number: 5
Enter the second number: 6
Enter the third number: 7
The greatest number is: 7
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 5

Title:WAP to find sum and average of numbers from 1 to 10.

Code:

```
public class SumAndAverage {
    public static void main(String[] args) {
        int sum = 0;
        int count = 10;

        for (int i = 1; i <= 10; i++) {
            sum += i;
        }
        double average = (double) sum / count;

        System.out.println("The sum of numbers from 1 to 10 is: " +
sum);
        System.out.println("The average of numbers from 1 to 10 is:
" + average);
    }
}
```

Output: (screenshot)



```
cd "/Users/chaitanyadalvi/Desktop/Java/" && javac SumAndAverage.java && java SumAndAverage
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac SumAndAverage.java & java SumAndAverage
The sum of numbers from 1 to 10 is: 55
The average of numbers from 1 to 10 is: 5.5
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 6

Title: Write a program that prompts the user to input a positive integer. It should then print the multiplication table of that number.

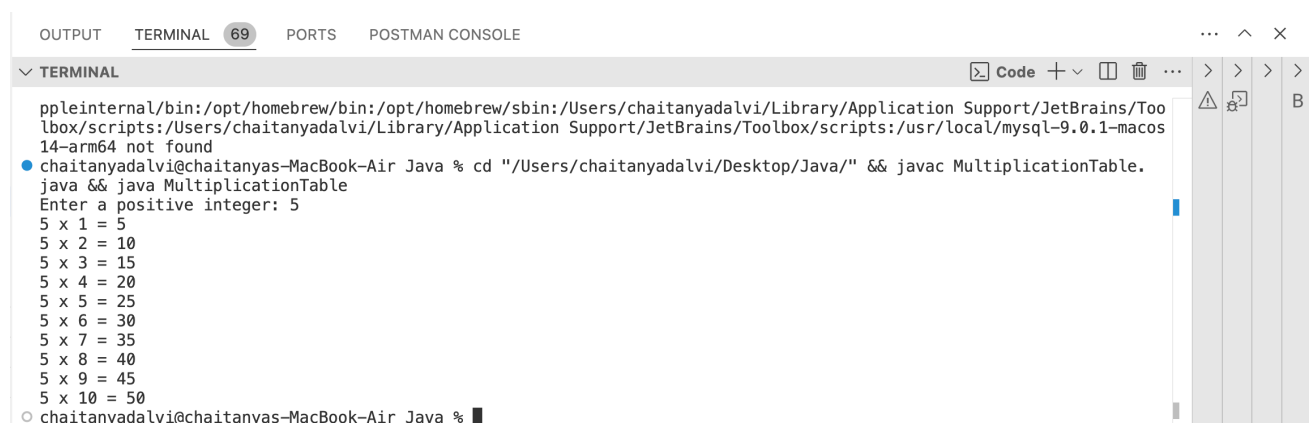
Code:

```
import java.util.Scanner;

public class MultiplicationTable {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a positive integer: ");
        int number = scanner.nextInt();

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

Output: (screenshot)



```
ppleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos
14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac MultiplicationTable.
java && java MultiplicationTable
Enter a positive integer: 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 7

Title: WAP to find greatest among three numbers using conditional operator.

Code:

```
import java.util.Scanner;

public class GreatestNumber {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the first number: ");
        int num1 = scanner.nextInt();

        System.out.print("Enter the second number: ");
        int num2 = scanner.nextInt();

        System.out.print("Enter the third number: ");
        int num3 = scanner.nextInt();

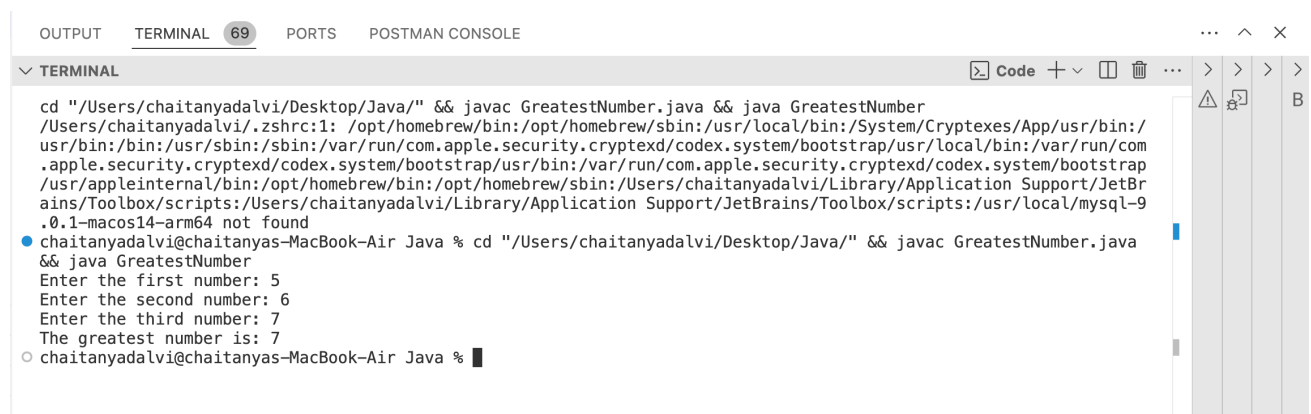
        int greatest;

        if (num1 >= num2 && num1 >= num3) {
            greatest = num1;
        } else if (num2 >= num1 && num2 >= num3) {
            greatest = num2;
        } else {
            greatest = num3;
        }

        System.out.println("The greatest number is: " + greatest);

        scanner.close();
    }
}
```

Output: (screenshot)



```
cd "/Users/chaitanyadalvi/Desktop/Java/" && javac GreatestNumber.java && java GreatestNumber
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos14-arm64 not found
chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac GreatestNumber.java
&& java GreatestNumber
Enter the first number: 5
Enter the second number: 6
Enter the third number: 7
The greatest number is: 7
chaitanyadalvi@chaitanyas-MacBook-Air Java %
```


Roll Number: 19

Experiment No: 8

Title: WAP to print odd numbers between 1 to 20.

```
public class OddNumbers {
    public static void main(String[] args) {
        for (int i = 1; i <= 20; i++) {
            if (i % 2 != 0) {
                System.out.println(i);
            }
        }
    }
}
```

Output: (screenshot)

```
OUTPUT  TERMINAL 69 PORTS POSTMAN CONSOLE
▼ TERMINAL
.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap
/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBr
ains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9
.0.1-macos14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac OddNumbers.java && j
ava OddNumbers
1
3
5
7
9
11
13
15
17
19
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 9

Title: WAP to find whether a number is prime or not.

Code:

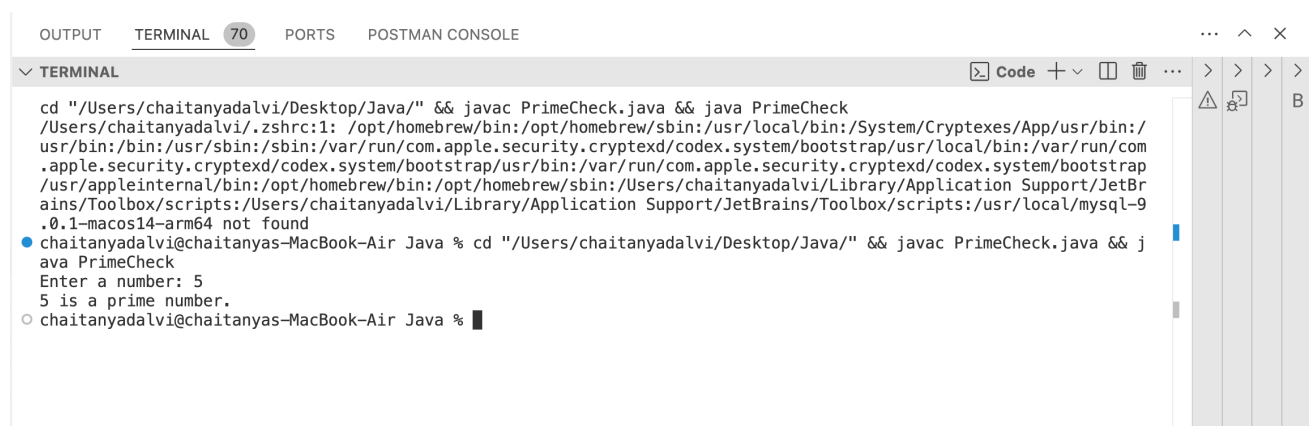
```
import java.util.Scanner;

public class PrimeCheck {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a number: ");
        int num = scanner.nextInt();
        boolean isPrime = true;

        if (num <= 1) {
            isPrime = false;
        } else {
            for (int i = 2; i <= Math.sqrt(num); i++) {
                if (num % i == 0) {
                    isPrime = false;
                    break;
                }
            }
        }

        if (isPrime) {
            System.out.println(num + " is a prime number.");
        } else {
            System.out.println(num + " is not a prime number.");
        }
    }
}
```

Output: (screenshot)



```
cd "/Users/chaitanyadalvi/Desktop/Java/" && javac PrimeCheck.java && java PrimeCheck
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac PrimeCheck.java && java PrimeCheck
Enter a number: 5
5 is a prime number.
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 10

Title: Write a Java Program find out Students Grades using Switch Case

Code:

```
import java.util.Scanner;

public class StudentGrades {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the student's score (0-100): ");
        int score = scanner.nextInt();

        char grade;

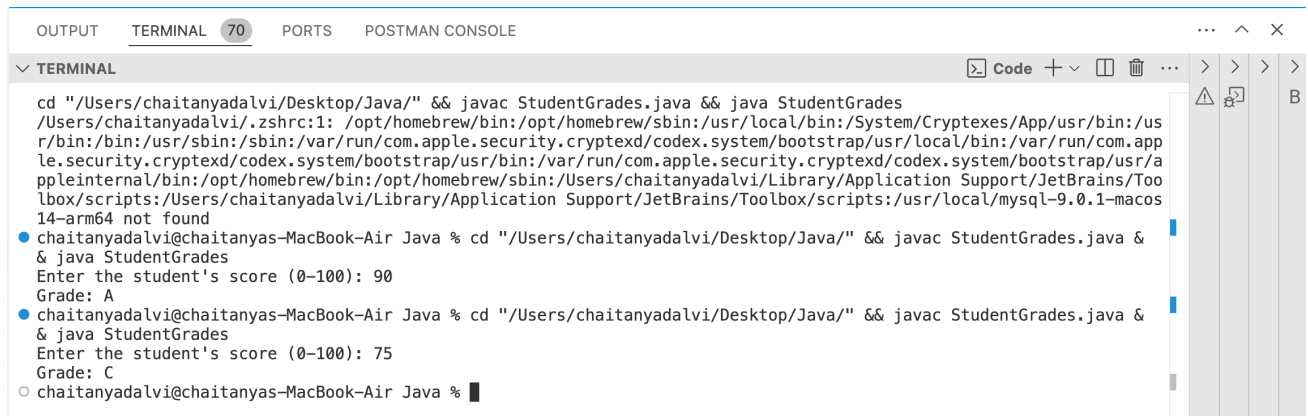
        if (score >= 90) {
            grade = 'A';
        } else if (score >= 80) {
            grade = 'B';
        } else if (score >= 70) {
            grade = 'C';
        } else if (score >= 60) {
            grade = 'D';
        } else {
            grade = 'F';
        }

        switch (grade) {
            case 'A':
                System.out.println("Grade: A");
                break;
            case 'B':
                System.out.println("Grade: B");
                break;
            case 'C':
                System.out.println("Grade: C");
                break;
            case 'D':
                System.out.println("Grade: D");
                break;
            case 'F':
                System.out.println("Grade: F");
                break;
        }
    }
}
```

```
        break;
    }

    scanner.close();
}
}
```

Output: (screenshot)



```
cd "/Users/chaitanyadalvi/Desktop/Java/" && javac StudentGrades.java && java StudentGrades
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos-14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac StudentGrades.java && java StudentGrades
Enter the student's score (0-100): 90
Grade: A
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac StudentGrades.java && java StudentGrades
Enter the student's score (0-100): 75
Grade: C
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 11

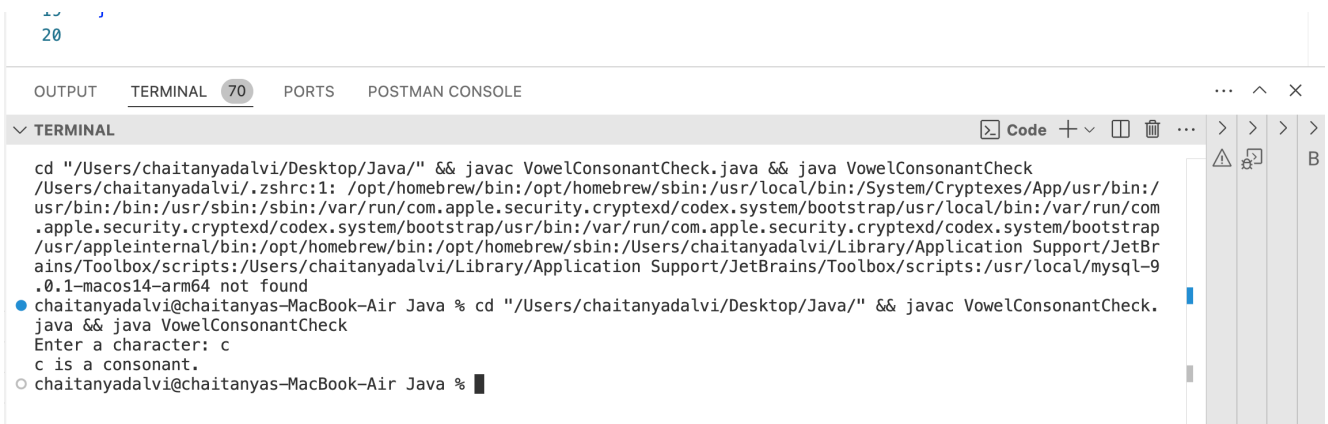
Title:WAP to check whether the inputted character is Vowel or Consonant.**Code:**

```
import java.util.Scanner;

public class VowelConsonantCheck {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a character: ");
        char ch = scanner.next().charAt(0);
        scanner.close();

        if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch
== 'u' ||
        ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch
== 'U') {
            System.out.println(ch + " is a vowel.");
        } else if ((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <=
'Z')) {
            System.out.println(ch + " is a consonant.");
        } else {
            System.out.println(ch + " is not an alphabet.");
        }
    }
}
```

Output: (screenshot)



```
cd "/Users/chaitanyadalvi/Desktop/Java/" && javac VowelConsonantCheck.java && java VowelConsonantCheck
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/
usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com
.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap
/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBr
ains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9
.0.1-macos14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac VowelConsonantCheck.
java && java VowelConsonantCheck
Enter a character: c
c is a consonant.
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 12

Title: WAP to check whether the inputted number is Armstrong Number or not.
(Hint:

An Armstrong number is a positive m-digit number that is equal to the sum of the mth powers

of their digits. It is also known as pluperfect, or Plus Perfect, or Narcissistic number.

153: $1^3 + 5^3 + 3^3 = 1 + 125 + 27 = 153$ (An Armstrong Number),

125: $1^3 + 2^3 + 5^3 = 1 + 8 + 125 = 134$ (Not an Armstrong Number)

Hint: use `Math.pow(num1, num2)` to calculate power

Code:

```
import java.util.Scanner;

public class ArmstrongNumber {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a number: ");
        int num = scanner.nextInt();
        scanner.close();

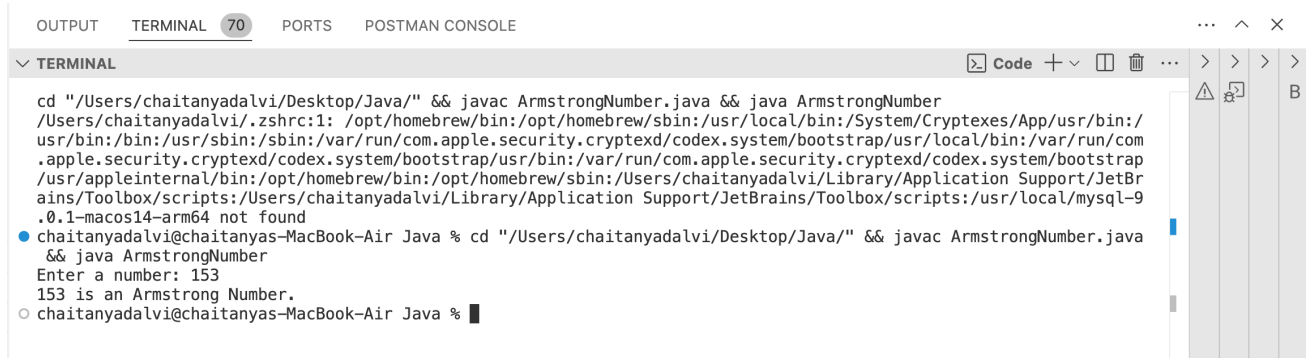
        int originalNum = num;
        int digits = String.valueOf(num).length();
        int sum = 0;

        while (num > 0) {
            int digit = num % 10;
            sum += Math.pow(digit, digits);
            num /= 10;
        }

        if (sum == originalNum) {
            System.out.println(originalNum + " is an Armstrong
Number.");
        } else {
            System.out.println(originalNum + " is not an Armstrong
Number.");
        }
    }
}
```

```
}  
}
```

Output: (screenshot)



The screenshot shows a terminal window with the following content:

```
cd "/Users/chaitanyadalvi/Desktop/Java/" && javac ArmstrongNumber.java && java ArmstrongNumber  
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos14-arm64 not found  
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac ArmstrongNumber.java && java ArmstrongNumber  
Enter a number: 153  
153 is an Armstrong Number.  
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 13

Title: WAP to demonstrate the concept of method overriding.

Code:

```
import java.util.Scanner;

public class GuessTheNumber {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int number = (int) (Math.random() * 100) + 1;
        int guess = 0;

        while (guess != number) {
            System.out.print("Enter your guess: ");
            guess = scanner.nextInt();

            if (guess > number) {
                System.out.println("Too high, try again.");
            } else if (guess < number) {
                System.out.println("Too low, try again.");
            }
        }

        System.out.println("Congratulations! You guessed the number.");
        scanner.close();
    }
}
```

Output: (screenshot)

```
usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos14-arm64 not found
chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac GuessTheNumber.java
chaitanyadalvi@chaitanyas-MacBook-Air Java % java GuessTheNumber
Enter your guess: 23
Too low, try again.
Enter your guess: 5
Too low, try again.
Enter your guess: 66
Too low, try again.
Enter your guess: 100
Congratulations! You guessed the number.
```


Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 14

Title: WAP to demonstrate the use of super keyword to call overridden methods and instance variables.

Code:

```
import java.util.Scanner;

public class AverageOddEven {

    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the value of N: ");
        int N = scanner.nextInt();

        System.out.print("Enter 1 for odd numbers or 2 for even
numbers: ");
        int choice = scanner.nextInt();

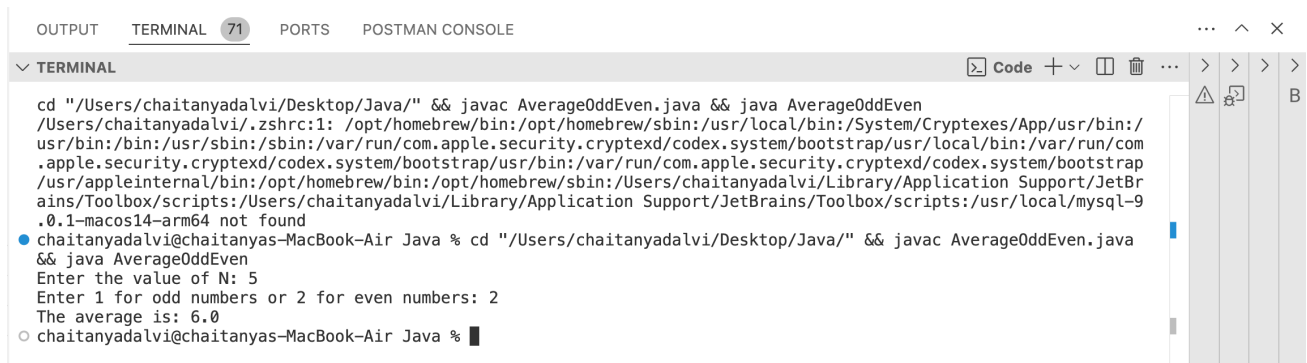
        if (N <= 0) {
            System.out.println("N must be positive.");
            return;
        }

        int sum = 0;
        if (choice == 1) {
            for (int i = 0; i < N; i++) {
                sum += 2 * i + 1;
            }
        } else if (choice == 2) {
            for (int i = 0; i < N; i++) {
                sum += 2 * i + 2;
            }
        } else {
            System.out.println("Invalid choice.");
            return;
        }

        double average = (double) sum / N;
```

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

Output: (screenshot)



The screenshot shows a terminal window with the following content:

```
cd "/Users/chaitanyadalvi/Desktop/Java/" && javac AverageOddEven.java && java AverageOddEven
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos14-arm64 not found
● chaitanyadalvi@chaitanyas-MacBook-Air Java % cd "/Users/chaitanyadalvi/Desktop/Java/" && javac AverageOddEven.java && java AverageOddEven
Enter the value of N: 5
Enter 1 for odd numbers or 2 for even numbers: 2
The average is: 6.0
○ chaitanyadalvi@chaitanyas-MacBook-Air Java %
```

Name of Student: Chaitanya Dalvi

Roll Number: 19

Experiment No: 15

Title: WAP to reverse a positive number.

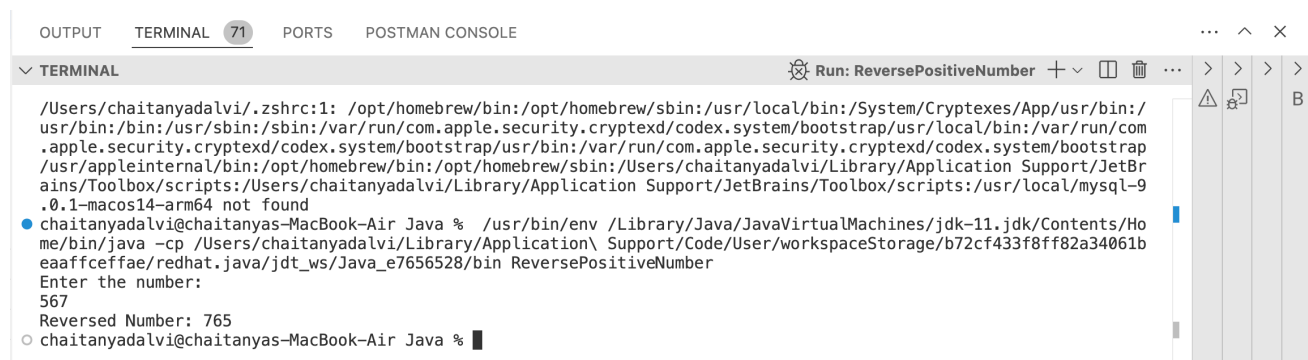
```
import java.util.Scanner;

public class ReverseNumber {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int number = scanner.nextInt();
        int reversed = 0;

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

        System.out.println(reversed);
    }
}
```

Output: (screenshot)



The screenshot shows a terminal window with the following content:

```
OUTPUT  TERMINAL 71 PORTS POSTMAN CONSOLE
Run: ReversePositiveNumber
/Users/chaitanyadalvi/.zshrc:1: /opt/homebrew/bin:/opt/homebrew/sbin:/usr/local/bin:/System/Cryptexes/App/usr/bin:/usr/bin:/bin:/usr/sbin:/sbin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/local/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/bin:/var/run/com.apple.security.cryptexd/codex.system/bootstrap/usr/appleinternal/bin:/opt/homebrew/bin:/opt/homebrew/sbin:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/Users/chaitanyadalvi/Library/Application Support/JetBrains/Toolbox/scripts:/usr/local/mysql-9.0.1-macos14-arm64 not found
chaitanyadalvi@chaitanyas-MacBook-Air Java % /usr/bin/env /Library/Java/JavaVirtualMachines/jdk-11.jdk/Contents/Home/bin/java -cp /Users/chaitanyadalvi/Library/Application Support/Code/User/workspaceStorage/b72cf433f8ff82a34061beaaffceffae/redhat.java/jdt_ws/Java_e7656528/bin ReversePositiveNumber
Enter the number:
567
Reversed Number: 765
chaitanyadalvi@chaitanyas-MacBook-Air Java %
```