

## Reverse a String

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

String originalWord = "Hello Dinesh";
String reversedWord = " ";

for (int i = originalWord.length() - 1; i >= 0; i--) {
reversedWord = reversedWord + originalWord.charAt(i);
}
System.out.println(reversedWord);
}
```

## Reverse a number

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

int number = 412365, reverse = 0;

for(;number != 0;) {

int remainder = number % 10;
reverse = reverse*10 + remainder;
number = number / 10;
}
System.out.println(reverse);
}
```

## Java program to check string palindrome

```
public static void main(String[] args) {
Scanner scanner = new Scanner(System.in);
System.out.print("Enter a string: ");
String input = scanner.nextLine().toLowerCase(); // Convert input to lowercase
scanner.close();
```

```
boolean isPalindrome = true;
for (int i = 0; i < input.length() / 2; i++) {
if (input.charAt(i) != input.charAt(input.length() - 1 - i)) {
isPalindrome = false;
break;
}
}
System.out.println(isPalindrome ? "Palindrome" : "Not Palindrome");
}
```

## Java program to check number palindrome

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

int num = 3553, reversedNum = 0, remainder;

int originalNum = num;

while (num != 0) {
```

```

        remainder = num % 10;
        reversedNum = reversedNum * 10 + remainder;
        num /= 10;
    }
    if (originalNum == reversedNum) {
        System.out.println(originalNum + " is Palindrome.");
    }
    else {
        System.out.println(originalNum + " is not Palindrome.");
    }
}

```

### Reversing the order of words

```

public static void main(String args[]) {
    Scanner scanner = new Scanner(System.in);
    System.out.print("Enter a string: ");
    String input = scanner.nextLine();
    scanner.close();
    String s[] = input.split(" ");
    String ans = "";
    for (int i = s.length - 1; i >= 0; i--) {
        ans += s[i] + " ";
    }
    System.out.println("Reversed String: " + ans);
}

```

### Removing duplicate words in a Sentence

```

public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    System.out.print("Enter a string: ");
    String input = scanner.nextLine();
    scanner.close();

    StringBuilder result = new StringBuilder();
    for (int i = 0; i < input.length(); i++) {
        char c = input.charAt(i);
        if (result.indexOf(String.valueOf(c)) == -1) {
            result.append(c);
        }
    }

    System.out.println("String with duplicates removed: " + result.toString());
}

```

### Replacing a word in a given sentence:

```
public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter a original sentence: ");
    String input = sc.nextLine();
    System.out.println("Enter the word to replace in "+input);
    String wordToReplace = sc.nextLine();
    System.out.print("Enter the replacement word: ");
    String replacement = sc.nextLine();
    String modifiedString = input.replace(wordToReplace, replacement);
    System.out.println("Modified String: " + modifiedString);
    sc.close();
}
```

### Prime number or not

```
public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the number to check prime or not");
    int number = sc.nextInt();
    int i;
    if(number == 1) {
        System.out.println("Apologies, the prime number starts from 2");
    }
    for(i=2; i<number; i++) {
        if(number % i == 0) {
            System.out.println(number + " :Is not a prime number");
            break;
        }
    }
    if(number == i) {
        System.out.println(number + " :is a prime number");
    }
}
```

### Fibanocci series

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

    System.out.print("Enter the number of terms in the Fibonacci series: ");

    int n = scanner.nextInt();

    scanner.close();

    int first = 0;
    int second = 1;
    int next;

    System.out.println("Fibonacci Series:");

    for (int i = 0; i < n; i++) {
        System.out.print(first + " ");
        next = first + second;
        first = second;
        second = next;
    }
}
```

### Write a Java Program to generate Output "aabbccccc" with the input "a2b3c4"

```
public static void main(String[] args) {
    String input = "a2b3c4";
    String output = "";
    for (int i = 0; i < input.length(); i += 2) {
        char ch = input.charAt(i);
        int count = Character.getNumericValue(input.charAt(i + 1));
        for (int j = 0; j < count; j++) {
            output += ch;
        }
    }
    System.out.println(output);
}
```

### Swapping a string

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

    String firstName = "Sai";
    String secondName = "Kavya";

    System.out.println("Before swapping: " + firstName + secondName );
    firstName = firstName + secondName;
```

```
secondName = firstName.substring(0, firstName.length() -
secondName.length());

firstName = firstName.substring(secondName.length());

System.out.println("After Swapping : "+ firstName + secondName );
}
```