

1) Aim:- To write Java program for reversing a number.

Pseudocode:-

- => Initialize the variables and get the number from the user.
- => Using the while loop perform.
- => Get the largest digit from the number.
- => Add it with sum & multiply with 10.
- => Display the result.

Program:-

```
import java.util.Scanner;  
public class reverse.number {  
    public static void main (String [] args) {  
        Scanner input = new Scanner(System.in);  
        System.out.print ("Enter the number:");  
        int num = scanner.next int();  
        int rev = 0, temp;  
        while (num > 0) {  
            temp = num % 10;  
            rev = rev * 10 + temp;  
            num = num / 10;  
        }  
    }  
}
```

Sample output:-

enter the number : 2436
reversed number : 6342

Assignment-02

Java

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            rev = rev * 10 + temp;  
            num = num / 10;  
        }  
    }  
}
```

Sample output:-

enter the number : 2436
reversed number : 6342

② **Aim:-** To write java program for checking a number is armstrong or not.

Pseudo code:-

=> Initialize the variables and get the input number
=> Using while loop get last digit from the number
=> Find the cube and add it with sum variable then remove it.

=> eg:- $153 = 1^3 + 5^3 + 3^3$

Program:-

```
import java.util.Scanner;  
public class armstrong {  
    public static void main (String [] args) {  
        System.out.print ("enter the number:");  
        int n = input.next int ();  
        int temp = n, sum = 0;  
        while (n > 0) {  
            b = n % 10;  
            sum + = b * b * b;  
            n = n / 10; }  
        if (sum == temp) {  
            System.out.print ("Armstrong")  
        }  
    }  
}
```

sample output:-

enter the number = 153
Armstrong.

③ Aim:- To write Java program for graphy the gcd of two number.

Pseudo code:-

- ⇒ Initialize the variables and get the numbers a & b from the user.
- ⇒ Using the for loop find a number which is less than a & b and also the number.
- ⇒ If you get multiple numbers then choose the largest one.

Program:-

```
import java.util.Scanner;  
public class gcd {  
    public static void main (String [] args) {  
        Scanner input = new Scanner (System.in);
```

```
        int a = input.nextInt();
```

```
        int b = input.nextInt();
```

```
        int i, gcd = 1;
```

```
        for (i = 1; i <= a & i <= b; i++)
```

```
        {  
            if (a % i == 0 & b % i == 0)
```

```
            {  
                gcd = i;
```

```
            }  
        }  
    }  
}
```

Sample output:-

Enter two numbers : 6 90

gcd = 6

⑤ **Aim:** - To write Java program for find the frequency of each char in a string.

Pseudo code:-

- ⇒ Initialize the variables and get the input string from user.
- ⇒ An array of size 256 is used to store the frequency of each ASCII character.
- ⇒ Operate the loop over each char of the string.

Program:-

```
public class frequency {  
    public static void main (String [] args) {  
        String input = "hello";  
        int [] frequency = new int [256];  
        for (int i=0; i < input.length; i++) {  
            char ch = input.charAt(i);  
            frequency [ch]++;  
        }  
        for (i=0; i < frequency.length; i++) {  
            if (frequency [i] > 0) {  
                }  
            }  
        }  
    }  
}
```

Sample output:-

e = 2

h = 2

l = 2

o = 1