



JAVA PROGRAMMING



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1. FACE VALUE, PLACE, PLACE VALUES:

Source Program:

```
import java.util.Scanner;

public class FacePlaceValue{

    public static void main(String[] args){

        Scanner sc = new Scanner(System.in);

        int d, r, place;

        int n;

        int place_value = 0;

        System.out.println("Enter a number...");

        n = sc.nextInt();

        System.out.println("Enter any digit in that number...");

        d = sc.nextInt();

        place = 1;

        while(n > 0){

            r = n % 10;

            if(r == d){

                place_value = d * place;

                break;

            }

            n = (int) n / 10;

            place *= 10;

        }

        System.out.println("Place : " + place + "'s");

        System.out.println("Place Value : " + place_value);

        System.out.println("Face Value : " + d);

    }

}
```

Output:

```
C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>java FacePlaceValue
Enter a number...
3863
Enter any digit in that number...
3
Place : 1's
Place Value : 3
Face Value : 3

C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>java FacePlaceValue
Enter a number...
6734
Enter any digit in that number...
6
Place : 1000's
Place Value : 6000
Face Value : 6
```

2. LARGEST AND SMALLEST NUMBER

Source Code:

```
import java.util.Scanner;
import java.util.Arrays;
import java.util.Collections;

public class LargestSmallest{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the no of digits...");
        int length = sc.nextInt();
        int[] arr = new int[length];
        System.out.println("Enter the elements...");
```

```

    for(int i=0;i<length;i++){
        arr[i] = sc.nextInt();
    }
    Arrays.sort(arr);
    System.out.print("\nSmallest Number : ");
    PrintArray(arr);
    SortArrayDesc(arr);
    System.out.print("\nLargest Number : ");
    PrintArray(arr);
}

static void PrintArray(int[] arr){
    for(int i=0; i<arr.length;i++){
        System.out.print(arr[i]);
    }
}

static void SortArrayDesc(int[] arr){
    for(int i=0; i<arr.length;i++){
        for(int j=i+1; j<arr.length;j++){
            if(arr[i] < arr[j]){
                int temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
    }
}
}

```

Output:

```
C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>javac LargestSmallest.java

C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>java LargestSmallest
Enter the no of digits...
4
Enter the elements...
1
6
3
7

Smallest Number : 1367
Largest Number : 7631
C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>java LargestSmallest
Enter the no of digits...
5
Enter the elements...
3
8
4
9
2

Smallest Number : 23489
Largest Number : 98432
C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>_
```

3. MINIMUM NUMBER OF DENOMINATIONS

Source Code:

```
import java.util.Scanner;

public class CurrencyNotes{

    public static void main(String[] args){

        int[] cn = {2000, 500, 100, 50, 20, 10, 5, 2, 1};
        int[] notes = {0, 0, 0, 0, 0, 0, 0, 0, 0};
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the amount...");
        int amount = sc.nextInt();
        while (amount > 0)
        {
            for(int i = 0; i<cn.length; i++){
                if(amount - cn[i] >= 0){
                    notes[i] += 1;
                    amount -= cn[i];
                    break;
                }
            }
        }
        System.out.println("Currency Notes Denominations...");
        for(int i = 0; i<cn.length; i++)
        {
            if(notes[i]!=0){
                System.out.println(cn[i] + " : " + notes[i]); }
        }
    }
}
```

```
}
```

Output:

```
C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>javac CurrencyNotes.java

C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>java CurrencyNotes
Enter the amount...
2567
Currency Notes Denominations...
2000 : 1
500 : 1
50 : 1
10 : 1
5 : 1
2 : 1
```

```
C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>java CurrencyNotes
Enter the amount...
5041
Currency Notes Denominations...
2000 : 2
500 : 2
20 : 2
1 : 1

C:\Users\ELCOT\Desktop\PRACTICING_PYTHON\JAVA_CLASS>
```