

# EXPERIMENT - 1

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**1. Write a java program find the largest of 3 numbers using nested if statement.**

**INPUT:**

```
import java.util.*;

public class Ex_1_1{

    public static void main(String[] args) {

        Scanner in = new Scanner(System.in);

        System.out.print("Enter the First Number:");

        int a = in.nextInt();

        System.out.print("Enter the Second Number:");

        int b = in.nextInt();

        System.out.print("Enter the Third Number:");

        int c = in.nextInt();

        if(a==b&& a==c){System.out.print("Three Numbers are Same");}

        else if(a>=b && a>=c){System.out.print("Greatest Number is "+a);}

        else if(b>=a && b>=c){System.out.print("Greatest Number is "+b);}

        else{System.out.print("Greatest Number is "+c);}

    }

}
```

**OUTPUT:**

```
Enter the First Number:65

Enter the Second Number:45

Enter the Third Number:33

Greatest Number is 65
```

**2. Write a java program to check given character is vowels or not.**

**INPUT:**

```
import java.util.*;

public class Ex_1_2 {

    public static void main(String[] args) {

        Scanner in=new Scanner(System.in);

        System.out.print("Enter the Character:");

        char a=in.next().charAt(0);

        if (a=='a' || a=='A'){System.out.print("Given Character is Vowel");}

        else if (a=='e' || a=='E'){System.out.print("Given Character is Vowel");}

        else if (a=='i' || a=='I'){System.out.print("Given Character is Vowel");}

        else if (a=='o' || a=='O'){System.out.print("Given Character is Vowel");}

        else if (a=='u' || a=='U'){System.out.print("Given Character is Vowel");}

        else{System.out.print("Given Character is not a Vowel");}

    }

}
```

**OUTPUT:**

Enter the Character:F

Given Character is not a Vowel

**3. Write a java program to generate list of even numbers using while loop.**

**INPUT:**

```
import java.util.*;

public class Ex_1_3 {

    public static void main(String[] args){

        Scanner in=new Scanner(System.in);

        System.out.print("Enter the Number:");

        int n = in.nextInt();

        int i=0;

        List<Integer> mylist=new ArrayList<>();

        while (n>=i){

            if(i%2==0){mylist.add(i);}

            i+=1;

        }

        System.out.print("Even Number List:"+mylist);

    }

}
```

**OUTPUT:**

Enter the Number:23

Even Number List:[0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22]

**4. Write a java program to generate list of prime numbers using do. While loop.**

**INPUT:**

```
import java.util.*;

public class Ex_1_4 {

    public static void main(String[] args){

        Scanner in=new Scanner(System.in);

        System.out.print("Enter the Number:");

        int n=in.nextInt();

        List<Integer> mylist=new ArrayList<>();

        int count;

        int i=1;

        int j;

        do{

            count=0;

            j=1;

            do{

                if(i%j==0){count+=1;}

                j+=1;

            }while(i>=j);

            if (count==2){mylist.add(i);}

            i+=1;

        }while(n>=i);

        System.out.print("Prime Numbers Upto Given Number:"+mylist);

    }

}
```

**OUTPUT:**

Enter the Number:8

Prime Numbers Upto Given Number:[2, 3, 5, 7]

**5. Write a java program to generate Fibonacci series using for loop.**

**INPUT:**

```
import java.util.*;
```

```
public class Ex_1_5 {  
    public static void main(String[] args) {  
        Scanner in=new Scanner(System.in);  
        System.out.print("Enter the Number:");  
        int n=in.nextInt();  
        List<Integer> mylist=new ArrayList<>();  
        mylist.add(0);  
        mylist.add(1);int j;  
        for(int i=1;i<n-1;i++){j=mylist.get(i)+mylist.get(i-1);mylist.add(j);}  
        System.out.print("Fibonacci List : "+mylist);  
    }  
}
```

**OUTPUT:**

Enter the Number:8

Fibonacci List : [0, 1, 1, 2, 3, 5, 8, 13]

**6. Write a java program, how to implements break and continue statement.**

**INPUT:**

```
import java.util.*;

public class Ex_1_6 {

    public static void main(String[] args){

        Scanner in=new Scanner(System.in);

        System.out.print("Enter the Number:");

        int a=in.nextInt();

        int count=1;

        System.out.println("Numbers except the given Number");

        if (1<=a && a<=10){

            while(count<=10){

                if (count==a){count++;continue;}

                else if(count==10){count++;break;}

                System.out.print(count+" ");

                count++;

            }

        }

    }

}
```

**OUTPUT:**

Enter the Number:7

Numbers except the given Number

1 2 3 4 5 6 8 9