

```

package basic;
import java.util.*;
public class SwapWithoutThirdVar {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int a=10,b=20;

        System.out.println("Before Swap a= "+a +" b= "+b);

        //      a=a+b;//a=30
        //      b=a-b;//b=10
        //      a=a-b;//a=20

        a=a^b;
        b=a^b;
        a=a^b;

        System.out.println("After Swap a= "+a +" b= "+b);

    }

}
//Before Swap a= 10 b= 20
//After Swap a= 20 b= 10

```

```

package basic;
import java.util.*;
public class FibonacciSeries {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int n1=0,n2=1,n3,num;

        System.out.println("Enter a num :");
        Scanner sc=new Scanner(System.in);
        num=sc.nextInt();
        System.out.print(n1+" "+n2+" ");

        for(int i=2;i<num;i++){

            n3=n1+n2;
            System.out.print(n3+" ");
            n1=n2;

```

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        n2=n3;
    }

}

}
//Enter a num :
//10
//0 1 1 2 3 5 8 13 21 34

```

```

package basic;
import java.util.*;
public class FibonacciUsingRecursion {

    static int n1=0,n2=1,n3;

    public static void printFibonacci(int n){//8

        if(n>0){

            n3=n1+n2;
            System.out.print(n3+" ");//1 2 3 5 8 13 21 34
            n1=n2;
            n2=n3;

            printFibonacci(n-1);//7 6 5 4 3 2 1 0
        }

    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int num;
        System.out.println("Enter a num :");
        Scanner sc=new Scanner(System.in);
        num=sc.nextInt();//10

        System.out.print(n1+" "+n2+" ");
        printFibonacci(num-2);//beacuse 2 numbers already printed
//8

    }

}

//Enter a num :
//10

```

```
//0 1 1 2 3 5 8 13 21 34
```

```
package basic;
import java.util.*;
public class PrimeNumber {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int n,flag=0;

        System.out.println("Enter the number to check prime: ");
        Scanner sc=new Scanner(System.in);
        n=sc.nextInt();

        for(int i=2;i<=n/2;i++){
            if(n%i==0){
                System.out.print("Not prime");
                flag=1;
                break;
            }
        }
        if(flag==0){
            System.out.print("prime "+ n);
        }
    }
}
//Enter the number to check prime:
//3
//prime 3
```

```
package basic;
import java.util.*;
public class Palindrome {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int n,r,sum=0,temp=0;

        System.out.println("Enter a num :");
```

```

Scanner sc=new Scanner(System.in);
n=sc.nextInt();

temp=n;
while(n>0){

    r=n%10;
    sum=(sum*10)+r;
    n=n/10;
}
if(temp==sum){
    System.out.println("Palindrome");
}
else{
    System.out.println("Not Palindrome");
}

}

}

//Enter a num :
//121
//Palindrome

```

```

package basic;
import java.util.*;
public class Factorial {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int n,fact=1;

        System.out.println("Enter the number: ");
        Scanner sc=new Scanner(System.in);
        n=sc.nextInt();

        for(int i=1;i<=n;i++){
            fact=fact*i;
        }
        System.out.println("factorial of "+n+" is "+fact);

    }

}

//Enter the number:

```

```
//5
//factorial of 5 is 120
```

```
package basic;
import java.util.*;
public class FactorialUsingRecursion {

    public static long factorial(int n){

        if(n==0)
            return 1;

        else
            return (n*factorial(n-1));
    }

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int n;

        System.out.println("Enter the number: ");
        Scanner sc=new Scanner(System.in);
        n=sc.nextInt();

        System.out.println("factorial of "+n+" is
"+factorial(n));
    }
}
//Enter the number:
//4
//factorial of 4 is 24
```

```
package basic;
import java.util.*;
public class ArmstrongNumber {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int n,r,sum=0,temp;

        System.out.println("Enter the number: ");
        Scanner sc=new Scanner(System.in);
```

```

        n=sc.nextInt();

        temp=n;
        while(n>0){
            r=n%10;
            sum=sum+(r*r*r);
            n=n/10;
        }
        if(temp==sum){
            System.out.println("Armstrong numberrrrr");
        }
        else{
            System.out.println("no");
        }
    }

}
//Enter the number:
//153
//Armstrong numberrrrr

```

```

package basic;
import java.util.*;
public class ReverseANumber {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int n,rev=0,rem;

        System.out.println("Enter the number: ");
        Scanner sc=new Scanner(System.in);
        n=sc.nextInt();

        while(n!=0){

            rem=n%10;
            rev=rev*10+rem;
            n=n/10;
        }
        System.out.println("Reversed Number "+rev);

    }

}

```

```
//Enter the number:  
//123  
//Reversed Number 321
```

```
package basic;
```

```
public class CountOfDigits {  
  
    public static void main(String[] args) {  
        // TODO Auto-generated method stub  
  
        int n=123;  
        int c=0;  
  
        while(n>0){  
  
            n=n/10;  
            c++;  
  
        }  
        System.out.print(c);  
  
    }  
}  
//3
```

```
package basic;  
import java.util.*;  
public class CountEvenAndOddDigits {  
  
    public static void main(String[] args) {  
        // TODO Auto-generated method stub  
  
        int n=1234;  
  
        int evenCount=0;  
        int oddCount=0;  
  
        while(n>0){  
  
            int rem=n%10;  
            if(rem%2==0){  
                evenCount++;  
            }  
  
        }  
  
    }  
}
```

```

        else{
            oddCount++;
        }
        n=n/10;
    }
    System.out.println("evenCount "+evenCount);
    System.out.println("oddCount "+oddCount);
}
}
//evenCount 2
//oddCount 2

```

```

package basic;
import java.util.*;
public class SumOfDigits {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int n=1234;
        int sum=0;

        while(n>0){
            sum=sum+n%10; // 4+3+2+1
            n=n/10;
        }
        System.out.println("Sum Of Digits "+sum);
    }
}
//Sum Of Digits 10

```

```

package basic;
import java.util.*;
public class EvenNumberFromArray {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        int a[]={1,2,3,4,5,6};

        System.out.println("even elements ");
    }
}

```



```

    for(int i=0;i<a.length;i++){
        if(a[i]%2==0){
            System.out.print(a[i]+" ");
        }
    }
    System.out.println();
    System.out.println("odd elements ");

    for(int i=0;i<a.length;i++){
        if(a[i]%2!=0){
            System.out.print(a[i]+" ");
        }
    }
}
//even elements
//2 4 6
//odd elements
//1 3 5

```

```

package basic;

```

```

public class RemoveSpecialChar {

    public static void main(String[] args) {
        // TODO Auto-generated method stub

        //String s="isandas4325#$66666666666666663%^$#$&$$&^%*";
        //s=s.replaceAll("[^a-zA-Z0-9]", "");

        String s="hello worls hi ";
        s=s.replaceAll("\\s", "");

        System.out.println(s);

    }

}
//isandas43256666666666666666663
//helloworldshi

```

