Ans 2:-

```java
import java.util.Scanner;
class my_excep extends Exception{
    String detail;
    my_excep(String string){
        detail=string;
    }
    public String toString(){
        return detail;
    }
}
class fact{
    Scanner sc=new Scanner(System.in);
    int n;
    int result;
    int fact1(int n) throws my_excep{
        if(n>15)
            throw new my_excep("NUMBER GREATER THAN 15!!");
        else{
            if(n==1)
                return 1;
            result=n*fact1(n-1);
        return result;
        }
    }
}

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

```java
System.out.println("Enter the number(<15) for factorial:");

int num=sc.nextInt();

try {

    fact f=new fact();

    int res=f.fact1(num);

    System.out.println("Factorial:"+res);

} catch (my_excep e){

    System.out.println("EXCEPTION:"+e);

}

}

}
```
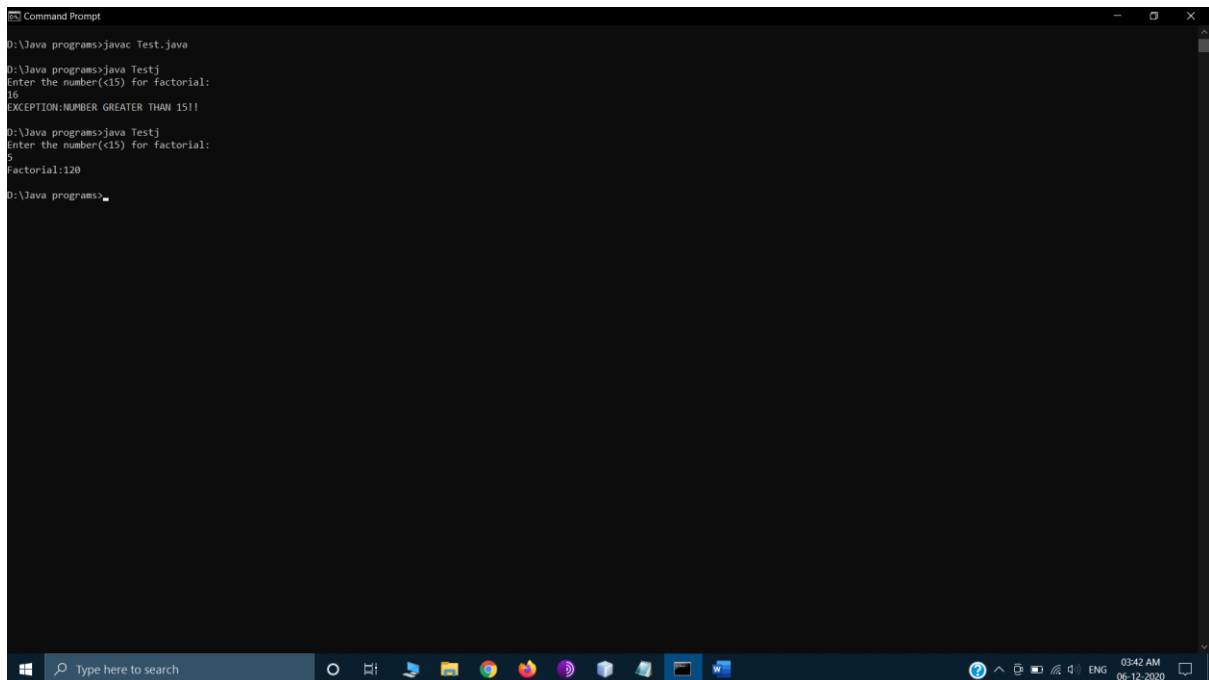
```
D:\Java programs>javac Test.java

D:\Java programs>java Testj
Enter the number(<15) for factorial:
16
EXCEPTION:NUMBER GREATER THAN 15!!

D:\Java programs>java Testj
Enter the number(<15) for factorial:
5
Factorial:120

D:\Java programs>
```

Ans 3:-

```java
import java.util.Scanner;
class my_excep extends Exception{
    String detail;
    my_excep(String string){
        detail=string;
    }
    public String toString(){
        return detail;
    }
}
class account{
    Scanner sc=new Scanner(System.in);
    double amount,balance;
    account(){
        System.out.println("Enter the balance of your account:");
        balance=sc.nextInt();
    }
    void withdraw() throws my_excep{
        System.out.println("Enter the amount to withdraw:");
        amount=sc.nextDouble();
        if(amount>balance)
            throw new my_excep("NOT ENOUGH BALANCE!!");
        else{
            balance-=amount;
        System.out.println("Updated Balance:"+balance);
        }
    }
    void display(){
```

```java
        System.out.println("Balance:"+balance);
    }
}


class Testj{
    public static void main(String args[]){
        Scanner sc=new Scanner(System.in);
        account a=new account();
        int choice;
        do{
            System.out.println("\n1.Show balance\n2.Withdraw\n3.Exit\nEnter your choice:");
            choice=sc.nextInt();
            switch(choice){
                case 1:a.display();
                break;
                case 2:try{
                    a.withdraw();
                }catch(my_excep e){
                    System.out.println("EXCEPTION:"+e);
                }
                break;
                case 3:System.exit(0);
            }
        }while(choice!=4);

    }
}
```

```
D:\Java programs>javac Test.java

D:\Java programs>java Testj
Enter the balance of your account:
10000

1.Show balance
2.Withdraw
3.Exit
Enter your choice:
1
Balance:10000.0

1.Show balance
2.Withdraw
3.Exit
Enter your choice:
2
Enter the amount to withdraw:
5000
Updated Balance:5000.0

1.Show balance
2.Withdraw
3.Exit
Enter your choice:
2
Enter the amount to withdraw:
6000
EXCEPTION:NOT ENOUGH BALANCE!!

1.Show balance
2.Withdraw
3.Exit
Enter your choice:
3

D:\Java programs>
```