```
package package1;
import java.util.*;

public class Prime_no {
	Scanner sc=new Scanner(System.in);
	int n,flag=0;
	public void prime() {
		System.out.println("Enter number");
		n=sc.nextInt();
		for(int i=2;i<n/2;i++) {
			if(n%i==0) {
				flag=1;
				break;
			}
		}
		if(flag==0)
			System.out.println("Prime no");
		else
			System.out.println("Not a prime no");
	}
}
package package1;
import java.util.*;

public class Armstrong {
	Scanner sc=new Scanner(System.in);
	int n,flag=0,sum=0;
	public void armstrong() {
		System.out.println("Enter number");
		n=sc.nextInt();
		int p=n,n1;
```

```
		while(n>0) {
			n1=n%10;
			sum+=(n1*n1*n1);
			n=n/10;
		}
		if(sum==p)
			System.out.println("Armstrong");
		else
			System.out.println("Not an armstrong");
	}
}
package package1;
import java.util.*;

public class Fibonacci {
	Scanner sc=new Scanner(System.in);
	int n,a=0,b=1,c;
	public void fibonacci() {
		System.out.println("Enter number");
		n=sc.nextInt();
		for(int i=1;i<=n;i++) {
			System.out.print(a+" ");
			c=a+b;
			a=b;
			b=c;
		}
	}
}
package package2;
import package1.*;
```

```
public class Common {

	public static void main(String[] args) {
		Prime_no p=new Prime_no();
		Armstrong a=new Armstrong();
		Fibonacci f=new Fibonacci();
		p.prime();
		a.armstrong();
		f.fibonacci();

	}

}
package package1;

public class Indoor {
	String game;
	public Indoor(String game){
		this.game=game;
	}
	public void display() {
		if(game.equalsIgnoreCase("chess"))
			System.out.println("No of Players - 2");
		else if(game.equalsIgnoreCase("carom"))
			System.out.println("No of Players - 2,4");
		else if(game.equalsIgnoreCase("ludo"))
			System.out.println("No of Players - 2,3,4");
		else
			System.out.println("No Data Available");
	}
}
```

```
package package1;


public class Outdoor {
	String game;
	public Outdoor(String game){
		this.game=game;
	}
	public void display() {
		if(game.equalsIgnoreCase("cricket"))
			System.out.println("No of Players - 11");
		else if(game.equalsIgnoreCase("shooting"))
			System.out.println("No of Players - 2");
		else if(game.equalsIgnoreCase("vollyball"))
			System.out.println("No of Players - 7");
		else
			System.out.println("No Data Available");
	}
}
package package2;
import java.util.*;
import package1.Indoor;
import package1.Outdoor;


public class Games {


	public static void main(String[] args) {
		Scanner sc=new Scanner(System.in);
		String game;
		System.out.println("Enter Number of indoor games");
		int i=sc.nextInt();
		System.out.println("Enter Number of outdoor games");
```

```
		int o=sc.nextInt();
		Indoor indoor[]=new Indoor[i];
		for(int j=0;j<i;j++) {
			System.out.println("Enter indoor game "+(j+1));
			game=sc.next();
			indoor[j]=new Indoor(game);
			indoor[j].display();
		}
		Outdoor outdoor[]=new Outdoor[o];
		for(int j=0;j<o;j++) {
			System.out.println("Enter outdoor game "+(j+1));
			game=sc.next();
			outdoor[j]=new Outdoor(game);
			outdoor[j].display();
		}
	}

}
package package1;

public class MathOperations {
	int a,b,c;
	public MathOperations(int a,int b,int c) {
		this.a=a;
		this.b=b;
		this.c=c;
	}
	public void display() {
		if(a<b && a<c)
			System.out.println("Max "+a);
		else if(b<c && b<a)
```

```
                System.out.println("Max "+b);
            else
                System.out.println("Max "+c);
            if(a>b && a>c)
                System.out.println("Min "+a);
            else if(b>a && b>c)
                System.out.println("Min "+b);
            else
                System.out.println("Min "+c);
        }
}
package package1;

public class StatsOperations {
        int a,b,c;
        public StatsOperations(int a,int b,int c) {
            this.a=a;
            this.b=b;
            this.c=c;
        }
        public void display() {
            double average=(a+b+c)/3;
            double median=(b+1)/2;
            System.out.println("Average "+average+"\tMedian "+median);
        }
}
package package2;
import java.util.*;
import package1.MathOperations;
import package1.StatsOperations;
```

```
public class Numbers {

	public static void main(String[] args) {
		Scanner sc=new Scanner(System.in);
		System.out.println("Enter 3 numbers ");
		int a=sc.nextInt();
		int b=sc.nextInt();
		int c=sc.nextInt();
		MathOperations m=new MathOperations(a,b,c);
		StatsOperations s=new StatsOperations(a,b,c);
		m.display();
		s.display();

	}

}
```