

1. MAGIC NUMBER

```
package test1;
import java.util.Scanner;

abstract class Magics {
    abstract public void magic();
}
class Magic1 extends Magics{
    Scanner s = new Scanner(System.in);
    int n;

    public void magic() {
        System.out.println("Enter a number:");
        n=s.nextInt();

        if(n%9==1) {
            System.out.println(n+" is a Magic Number.");
        }
        else {
            System.out.println(n+" ia not a Magic Number.");
        }
    }
}

public class Magic {

    public static void main(String[] args) {
        Magic1 m = new Magic1();
        m.magic();
    }
}
```

```
}
```

OUTPUT:

Enter a number:

2233

2233a Magic Number.

2. PRONIC NUMBER

```
package test1;
```

```
import java.util.Scanner;
```

```
interface Pronic{  
    public void pronic();  
}
```

```
class Pronic1 implements Pronic{  
    Scanner s = new Scanner(System.in);  
    int n;  
    boolean pro;  
    public void pronic(){  
        System.out.println("Enter a Number:");  
        n=s.nextInt();  
        pro=false;  
        for(int i=0;i<=n;++i) {  
            if(i*(i+1)==n) {  
                pro=true;  
                break;  
            }  
        }  
        if(pro) {  
            System.out.println(n+" is a Pronic Number.");  
        }  
        else {  
            System.out.println(n+" is not a Pronic Number.");  
        }  
    }  
}
```

```
        }  
  
    }  
}  
public class PronicN {  
  
    public static void main(String[] args) {  
        Pronic1 p = new Pronic1();  
        p.pronic();  
  
    }  
  
}
```

OUTPUT:

Enter a Number:

72

72 is a Pronic Number.