

1.

```
import java.util.*;

class code
{
    static void pos(int a)
    {
        for(int i=a-1;i>=0;i--)
        {
            System.out.print(i+" ");
        }
    }

    static void neg(int a)
    {
        for(int i=a;i<=0;i++)
        {
            System.out.print(i+" ");
        }
    }

    public static void main(String[] args) {
        Scanner scan=new Scanner(System.in);
        int n=scan.nextInt();
        if(n==0) System.out.println("already zero");
        if(n>0) pos(n);
        else neg(n);
    }
}
```

```
}
```

```
}
```

2.

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

```
class code
```

```
{
```

```
    private int pin = 1234;
```

```
        private int balance = 0;
```

```
    public int available()
```

```
    {
```

```
        return balance;
```

```
    }
```

```
        public int my_pin()
```

```
    {
```

```
        return pin;
```

```
    }
```

```
    public void Deposit(int amount)
```

```
    {
```

```
        balance+=amount;
```

```
}
```

```
public int Withdraw(int amount)
```

```
{
```

```
    if(balance<amount) return -1;
```

```
    balance-=amount;
```

```
    return 1;
```

```
}
```

```
public int BalanceEnquiry()
```

```
{
```

```
    return available();
```

```
}
```

```
public void PinChange(int newpin)
```

```
{
```

```
    pin=newpin;
```

```
}
```

```
}
```

```
class bank
```

```
{
```

```
    public static void main(String[] args)
```

```
    {
```

```
        code obj=new code();
```

```
        Scanner scan=new Scanner(System.in);
```

```
int amount=0, newpin=0;

        System.out.println("Enter the pin:");
        int oldpin=scan.nextInt();

        if(oldpin==obj.my_pin())
        {
            while(true)
            {
                System.out.println("Enter your
choice\n1.Deposit\n2.Withdrawal \n3.Balance enquiry\n4.PIN
change\n5.Exit");

                int choice=scan.nextInt();

                switch(choice)
                {
                    case 1: System.out.println("Enter the amount you
want to deposit:");
                        amount=scan.nextInt();
                        if(amount%100==0)
                        {
                            obj.Deposit(amount);

                            System.out.println("available
amount is "+ obj.available());
                        }
                        else
```

```

        {
            System.out.println("Invalid
amount");
        }
        break;
        case 2:    System.out.println("Enter the amount
you want to withdraw:");
            amount=scan.nextInt();
            if(amount%100==0)
                {
                    if(obj.Withdraw(amount)==-1)
                        System.out.println("Insufficient
amount\n");
                    else System.out.println("available
amount is "+ obj.available());
                }
            break;
        case 3: System.out.println("available balance is:
"+obj.BalanceEnquiry());
            break;
        case 4:    System.out.println("Enter the new pin:");
            newpin=scan.nextInt();
            obj.PinChange(newpin);
            System.out.println("pin updated
successfully\n");
            break;
        case 5: System.exit(0);
            break;

```

```

                                default: System.out.println("Invalid Choice");
                                }
                            }
                    }
else
{
    System.out.println("Invalid pin");
}
}
}

```

3.

```

import java.util.*;
class code
{
    static boolean isprime(int n)
    {
        for(int i=2;(i*i)<=n;i++)
            if(n%i==0) return false;
        return true;
    }

    static boolean SumPrime(int a, int b)
    {
        return (isprime(a) && isprime(b) && isprime(a+b))? true:false;
    }
}

```

```

public static void main(String[] args) {
    Scanner scan=new Scanner(System.in);

    System.out.println(SumPrime(2,3));
    System.out.println(SumPrime(7,11));
    System.out.println(SumPrime(3,7));
    System.out.println(SumPrime(8,11));

}

}

```

4.

```

import java.util.*;
class code
{
    static void stringTimes(String str, int a)
    {
        String s="";
        for(int i=1;i<=a;i++)
            s+=str;
        System.out.println(s);
    }
    public static void main(String[] args) {
        Scanner scan=new Scanner(System.in);

```

```
String str=scan.next();  
int a=scan.nextInt();  
stringTimes(str, a);  
}
```

```
}
```

5.

```
import java.util.*;  
class code  
{  
    public static void main(String[] args) {  
        Scanner scan=new Scanner(System.in);  
  
        int query=0, a=0, b=0, n=0, term=0;;  
        query=scan.nextInt();  
  
        for(int i=1;i<=query;i++)  
        {  
            a=scan.nextInt();  
            b=scan.nextInt();  
            n=scan.nextInt();  
  
            term=(int)(a+Math.pow(2, 0)*b);  
            System.out.print(term+" ");  
  
            for(int j=1;j<n;j++)
```



```
{  
    term+=Math.pow(2, j)*b;  
    System.out.print(term+" ");  
}  
System.out.println("\n");  
}  
}  
}
```