

Q1 create PIN using three given input numbers "Secure Assets Private Ltd", a small company that deal with digital lockers which can be locked and unlocked using PINs(password). You have been asked to work on the module that is expected to generate PINs using three input numbers. Assumption: The three given input numbers will always consist of three digit i.e. each of them will be in the range  $100 \leq \text{input1} \leq 999$   $100 \leq \text{input2} \leq 999$   $100 \leq \text{input3} \leq 999$  Below are the rules for generating the PIN- -The PIN should be made up of 4 digits -The unit(ones) position of the PIN should be the tens position of the three input numbers. -The hundreds position of the PIN should be the least of the hundred position of the three input numbers the three input numbers -The tens position of the PIN should be the least of the tens position of the three input numbers -The hundred position of the PIN should be the least of the hundreds position of the three input numbers -The thousand position of the PIN should be the maximum of all the digits in the three input numbers.

Example 1- input1=123 input2=582 input3=175

then PIN 8122 Example 2- input1=190 input2=267 input3=853

then PIN 9150

```
import java.util.Scanner; class num{
int a;
int b;
int c;
Scanner sc = new Scanner(System.in);
public num() {
    System.out.println("Enter the three numbers");
    a=sc.nextInt();
    b=sc.nextInt();
    c=sc.nextInt();
}}
class pin extends num{
int o;
int t;
int h;
int th;
public int max(int x)
{
    int z=x%10;
```

```

        x=x/10;
        if (z<x%10)
z=x%10;
        x=x/10;
        if(z<x)
            z=x;
return z;
}
public void unit(){
o=super.a%10;
    if(super.b%10<o)
o=super.b%10;
        if (super.c%10<o)
o=super.c%10;
    }
public void tens(){
t=super.a%100;
    t=t/10;
    int x=super.b%100;
x=x/10;
    if(t>x)
        t=x;
x=super.c%100;
    x=x/10;
    if(t>x)
        t=x;    }
public void hundred()
{
    h=super.a%1000;
    h=h/100;
int x=super.b%1000;
    x=x/100;
    if(h>x)
        h=x;
    x=super.c%1000;
x=x/100;

```

```

        if(h
        >x)
        h=x
        ;
    }
    public void thousand()
    { int a =
        max(super.a);
int b =
        max(super.b); int
        c = max(super.c);
th=a;
        if(th
        <b)
        th=b
        ;
if (th<c)
        th=c;

    }
    public void pinum()
    {
        System.out.println("The PIN is "+th+h+t+o);
    }
}
class Pingenerator {
    public static void main(String[] args) {
        pin p=new pin();
        p.unit();
        p.tens();
        p.hundred();
        p.thousand();
        p.pinum();
    }
}

```

Command Prompt

Microsoft Windows [Version 10.0.18363.1440]  
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C:\Users\User>cd Desktop

C:\Users\User\Desktop>cd java

C:\Users\User\Desktop\java>javac as3q1.java

C:\Users\User\Desktop\java>java Pingenerator

Enter the three numbers

123

582

175

The PIN is 8122

C:\Users\User\Desktop\java>

77  
import java.util.Scanner; (low mark)

int a;

int b;

int c;

Scanner sc = new Scanner(System.in);

public num () {

System.out.println("Enter the three numbers");

a = sc.nextInt();

b = sc.nextInt();

c = sc.nextInt();

}

class pin extends num {

int a;

int b;

int n;

int H;

public int max (int x)

{ int z = x % 10;

x = x / 10;

if (z < x % 10)

z = x % 10;

x = x / 10;

if (z < x /

z < x;

return z;

}

public void print () {

0 < Supar a % 10;

14 (Supar . 6 % 10)

0. super 67.10;

14 (super : 0%10 < 0)

0 = super 0%10

?

public void tens () {

int t = super a % 100;

t = t / 10;

int x = super b % 100;

x = x / 10;

if (t > x)

t = x;

public void hundred ()

{ int h = super a % 1000;

h = h / 100;

int x = super b % 1000;

x = x / 100;

if (h > x)

h = x;

x = super c % 1000;

x = x / 100;

if (h > x)

h = x;

} public void thousand () {

int a = max (super a);

int b = max super . ();

ph = 0;

