



Module 5: Program to find the key based on certain criteria



Problem Statement-

You are provided with 3 numbers within the range ≥ 1000 and ≤ 9999 i.e.,

$$1000 \leq \text{input1} \leq 9999$$

$$1000 \leq \text{input2} \leq 9999$$

$$1000 \leq \text{input3} \leq 9999$$

You are expected to find the key using the below formula –

$$\text{Key} = (\text{Thousands digit of input1} \times \text{Hundred Digit of input2}) - (\text{Largest Digit of input3})$$

Example:-

If input1=3521 and input 2=2452 and input3= 1352

Then key = $(3 \times 4) - 5 = 7$.

Solutions To Above Question

```
import java.util.*;
class key
{
    public static void main(String[] Args)
    {
        int input1, input2, input3, key;
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter a number");
        input1=sc.nextInt();
        input2 = sc.nextInt();
        input3 = sc.nextInt();
        input1= input1/1000;
        input2= input2/100;
        input2%=10;
        int max=0;
        while(input3>0) {
            int d= input3%10;
            if(d>max){
                max=d;
            }
            input3/=10;
        }
    }
}
```

```
    }
    key = (input1*input2)-max;
    System.out.println(key);
}
```