

**King Saud University**  
**College of Computer & Information Science**  
**CSC111 – Lab3**  
**Arithmetic operator, Increment, Decrement**  
**All Sections**

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Exercise 1:

Write a java program that reads an integer and print the least significant digit and the next least significant digit.

Example:

```
Enter an integer number > 7235
The least significant digit is 5
The next least significant digit is 3
```

**Answer :**

```
import java.util.Scanner;
public class digits {

    public static void main(String[ ] args) {
        Scanner in = new Scanner (System.in);
        int num, LS, NL;
        System.out.println("Enter an integer Number: ");
        num = in.nextInt();
        LS = num % 10;
        NL = (num % 100) /10;
        System.out.println("The Least Significant digit is: " + LS);
        System.out.println("The Next Least Significant digit is: " + NL);

    }

}
```

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## Exercise 2:

Trace the following java program and find the output:

```
import java.util.Scanner;
public class inc_dec {

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

        int x,y,z;
        System.out.println (" enter the values of x and y : ");

        x= read.nextInt ( );
        y= read.nextInt ( );
        z= x+y;

        System.out.println (++x);
        System.out.println (y--);
        System.out.println (z);
        System.out.println (x--);
        System.out.println (y);

    }
}
```

### Example:

enter the values of x and y :

1  
2

### Answer :

2  
2  
3  
2  
1

### Exercise 3:

Write a java program that reads an integer decimal number smaller than 32 and prints the equivalent representation in binary system.

*Hint: use four variables to store the value of the binary digits.*

Example:

```
Enter an integer number smaller than 15 > 12
The equivalent in binary = 01100
```

### **Answer :**

```
import java.util.Scanner;
public class convert {

    public static void main(String[ ] args) {
        Scanner X = new Scanner (System.in);
        int num, A, B, C, J, K, L, M;
        System.out.println("Enter an integer less than 15: " );
        num = X.nextInt();
        A = num / 2;
        B = A / 2;
        C = B / 2;
        J = num % 2;
        K = A % 2;
        L = B % 2;
        M = C % 2;
        System.out.println("the number in binary: " + M + L + K +J);

    }

}
```