

// Find the number of Factorion numbers within a Range

Code:

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

```
public class MainClass {
```

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

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

```
        System.out.print("Enter the lower bound of the range:");
```

```
        int lb = sc.nextInt();
```

```
        System.out.print("Enter the upper bound of the range:");
```

```
        int ub = sc.nextInt();
```

```
        boolean found = false;
```

```
        System.out.println("Factorion numbers in the range:");
```

```
        for (int i = lb; i <= ub; i++) {
```

```
            if (checkFactorion.isFactorion(i)) {
```

```
            if (checkFactorion.isFactorion(i)) {
```

```
                System.out.println(i);
```

```
                found = true;
```

```
            }
```

```
is (found) {
```

```
System.out.println("No factoron numbers found  
in the given range.");
```

```
}
```

```
sc.close();
```

```
}
```

```
Public class CheckFactoron {
```

```
Public static long fact (int n) {
```

```
long f = 1;
```

```
for (int i = 1; i <= n; i++) {
```

```
f *= i;
```

```
return f;
```

```
}
```

```
Public static boolean isFactoron (int num) {
```

```
int OrigNum = num;
```

```
long sum = 0;
```

```
while (num > 0) {
```

```
int dig = num % 10;
```

```
sum += fact (dig);
```

```
num /= 10;
```

return sum == OrigNum;

}

}