

Q3) write a program to find the number of composite numbers in an array of elements.

```
=
import java.util.*;
import java.util.Scanner;
public class composite {
    public static void main (String[] args) {
        int[] arr = {16, 18, 27, 16, 23, 21, 19};
        int count = 0;
        for (int num: arr) {
            if (isComposite(num)) {
                count++;
            }
        }
        System.out.println (count);
    }
    public static boolean isComposite (int num) {
        if (num <= 1) return false;
        for (int i = 2; i <= Math.sqrt(num); i++) {
            if (num % i == 0) {
                return true;
            }
        }
    }
}
```

34) find the  $n$ th odd num after  $n$  odd numbers.

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

```
public class findnth {
```

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

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

```
        int n = input.nextInt();
```

```
        int result = n * 4 - 1;
```

```
        System.out.println ("nth odd: " + result);
```

}

}

35) write a program to find whether given char in string or not.

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

```
public class findchar {
```

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

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

```
        String str = input.nextLine();
```

```
        char c = input.next().charAt(0);
```

```
        int index = -1;
```

```
        for (int i = 0; i < str.length; i++) {
```

```
if (str.charAt(i) == c) {
```

```
    index = i;
```

```
    break;
```

```
}
```

```
}
```

```
if (index >= 0) {
```

```
    System.out.println("found index: " + index);
```

```
}
```

```
else {
```

```
    System.out.println("not found");
```

```
}
```

```
}
```

```
}
```

Q6) write a program to print the below pattern

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

```
public class numberpattern {
```

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

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

```
        int n = input.nextInt();
```

```
        for (int i=1; i<= 2 * n - 1; i++) {
```

```
            int num = i <= n ? i : 2 * n - i;
```

```
            for (int j=1; j<=num; j++) {
```

```
                System.out.println (num + " ");
```

```
            }
```

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

```
    }
```

```
}
```

Q.5 program to find given num is Armstrong or not.

> import java.util.Scanner;

public class Armstrong {

public static void main (String args[]) {

Scanner Input = new Scanner (System.in);

int n = Input.nextInt();

int arm = 0, num = n;

while (num > 0) {

int digit = num % 10;

arm += digit \* digit \* digit;

num /= 10;

}

if (n == arm) {

System.out.println ("Armstrong number");

}

else {

System.out.println ("not armstrong number");

}

}

}

38) write a program to arrange the letters of words alphabetically in reverse order.

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

```
import java.util.Arrays;
```

```
public class main {
```

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

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

```
        char[] arr = input.next().toCharArray();
```

```
        Arrays.sort(arr);
```

```
        for (int i = arr.length - 1; i >= 0; i--) {
```

```
            System.out.println(arr[i] + " ");
```

```
        }
```

```
    }
```

```
}
```

39) write a program to remove the vowels?

```
= import java.util.Scanner;  
public class RemoveVowels {
```

```
    public static void main (String args[]) {  
        Scanner Input = new Scanner (System.in);  
        String result = Input.next().replaceAll("[aeiouAEIOU]", "");  
        System.out.println (result);  
    }
```

}

}

40) write a program to print hollow square pattern?

```
= import java.util.Scanner;  
public class Hollow {
```

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

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

```
        char c = Input.next().charAt(0);
```

```
        for (int i = 1; i <= 5; i++) {
```

```
            for (int j = 1; j <= 5; j++) {
```

```
                System.out.print ((i == 1 || j == 1 || i == 5 || j == 5 ? c : " "));
```

```
            }
```

```
        }
```

```
}
```

}

39) write a program to remove the vowels?

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

```
public class RemoveVowels {
```

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

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

```
        String result = Input.next().replaceAll("[aeiouAEIOU]", "");
```

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

```
    }
```

```
}
```

40) write a program to print hollow square pattern?

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

```
public class Hollow {
```

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

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

```
        char c = Input.next().charAt(0);
```

```
        for (int i = 1; i <= 5; i++) {
```

```
            for (int j = 1; j <= 5; j++) {
```

```
                System.out.print ((i == 1 || j == 1 || i == 5 || j == 5 ? c : " "));
```

```
            }
```

```
        }
```

```
}
```

```
}
```