



***JAVA SE**
FUNDAMENTALS*

ASSIGNMENT - 2

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B.C.A -I.O.T.

Assignment 2:-

```
Q81) Class WordsIn a string
{
    public static void main (String arg[])
    {
        Scanner sc = new Scanner (System.in);
        System.out.println ("enter a string");
        String s = sc.nextLine();
        int count = 0;
        for (int i = 0; i <= (s.length() - 1); i++)
        {
            if ((i > 0) && (s.charAt(i) != ' ') &&
                (s.charAt(i-1) == ' ')) // ((s.charAt(i) != ' ') &&
                (i == 0)))
            {
                count++;
            }
        }
        System.out.println ("number of words : " + count);
    }
}
```

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.19043.1348]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jhaay\Desktop\java>javac java.java

C:\Users\jhaay\Desktop\java>java java
enter a string
Ayush
number of words in a given string is :1

C:\Users\jhaay\Desktop\java>java java
enter a string
Ayush kumar jha is in dehradun
number of words in a given string is :6

C:\Users\jhaay\Desktop\java>
```

```
(Q2) package com.company;

abstract class employee {
    int total salary;
    int Deductions;
    abstract void net-salary();
}
```

```
class manager extends employee {
    int total-salary = 5000;
    int deductions = total-salary * 5/100;
    void net salary () {
        int net-salary = total-salary - deductions;
        System.out.println("The net salary of  
Manager is: " + net-salary);
    }
}
```

```
class clerk extends employee {
    int Total-salary = 1000;
    int deduction = total-salary * 10/100;
    void net-salary () {
        int net-salary = total-salary - deductions;
        System.out.println("The net salary  
of clerk is: " + net-salary);
    }
}
```

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```
public class office {
```

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

```
        manager ma = new manager();
```

```
        ma.net_salary();
```

```
        clerk cl = new clerk();
```

```
        cl.net_salary();
```

```
    }  
}
```

```
C:\Windows\System32\cmd.exe  
C:\Users\jhaay\Desktop\java>javac java.java  
C:\Users\jhaay\Desktop\java>java java  
Ayush kumar jha  
Characters and their corresponding frequencies  
A-1  
y-1  
u-2  
s-1  
h-2  
k-1  
m-1  
a-2  
r-1  
j-1  
C:\Users\jhaay\Desktop\java>
```


public class character? 8

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

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

```
string str = sc.nextLine();
```

```
int[] freq = new int[str.length()];
```

ind i, j

```
char string[] = str.toCharArray();
```

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

```
freq[i] = 1;
```

```
for (j = i + 1; j ≤ str.length(); j++) {
```

```
if (string[i] == string[j]) {
```

```
freq[i]++;
```

string[0] = '0';

26

76

3

```
System.out.println("Characters and their  
corresponding frequencies");
```

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

if (string[i] != ' ' && string[i] != '0')

```
system.out.println("String [i] + " +  
+ freq[i] );
```

3 3 3

```
C:\Windows\System32\cmd.exe

C:\Users\jhaay\Desktop\java>javac java.java

C:\Users\jhaay\Desktop\java>java java
Ayush kumar jha
Characters and their corresponding frequencies
A-1
y-1
u-2
s-1
h-2
k-1
m-1
a-2
r-1
j-1

C:\Users\jhaay\Desktop\java>
```

Q4. `import java.util. Arrays;`
`import java.util. Arrays;`
`public class Exception {`
`public static void main (String[] args) throws`
`java.lang. Exception {`

`System.out.println ("Enter the array size :-");`

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

`int a = sc.nextInt();`

`int[] a = new int [a];`

`int value;`

`try {`

`for (int i = 0; i < a; i++) {`

`value = sc.nextInt();`

`if (value < 0)`

`throw new java.lang. Exception();`

`a[i] = value;`

`}`

`System.out.println (Arrays.to string (a));`

`} catch (java.lang. Exception e) {`

`System.out.println ("Negative Size Exception`
`Found");`

`}`

`}`

`}`

```
"C:\Program Files\Java\jdk-16.0.2\bin\java.exe" "-javaagent:C
```

```
Enter the array size :-
```

```
5
```

```
12
```

```
13
```

```
14
```

```
-11
```

```
NegativeSizeException Found
```

```
Process finished with exit code 0
```