

CSA0979 Java programming

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2) *import java.util.*;*

class Account

{

double balance;

Account()

{

balance = 0;

}

Account(double sum)

{

balance = sum;

}

double add(double sum)

{

balance += sum;

return sum;

}

double withdraw(double sum)

{

if (sum > balance) {

balance -= 5;

return -5;

```

    }
    else {
        this.balance -= sum;
        return balance; // Notice: always >= 0 (never < 0)
    }
}

double inquire()
{
    return balance;
}

double interest (double rate)
{
    return rate * balance;
}
}

class bank1
{
    public static void main(String args[])
    {
        try
        {
            Scanner s=new Scanner(System.in);

            System.out.println("Enter account holder name:");
            String s1=s.next();
            System.out.println("Enter account type:");

```

```

        String s2=s.next();

int b=0;

        System.out.println("Enter the initial value");


b=s.nextInt();
Account A;
if (b==0){
A = new Account();
}
else{
A = new Account(b);
}


System.out.println("Enter the amount to withdraw");
b=s.nextInt();


double d = A.withdraw(b);

        System.out.println("Account holder name:"+s1);
        System.out.println("Account type:"+s2);

if (d == -5) {
System.out.println("Penaly RS. -5 is charged since insufficient balance");
System.out.println("Currrent balance" + A.inquire());
}
else{
System.out.println("Now balance after withdraw of" + A.inquire() + "is" + d);
}

```

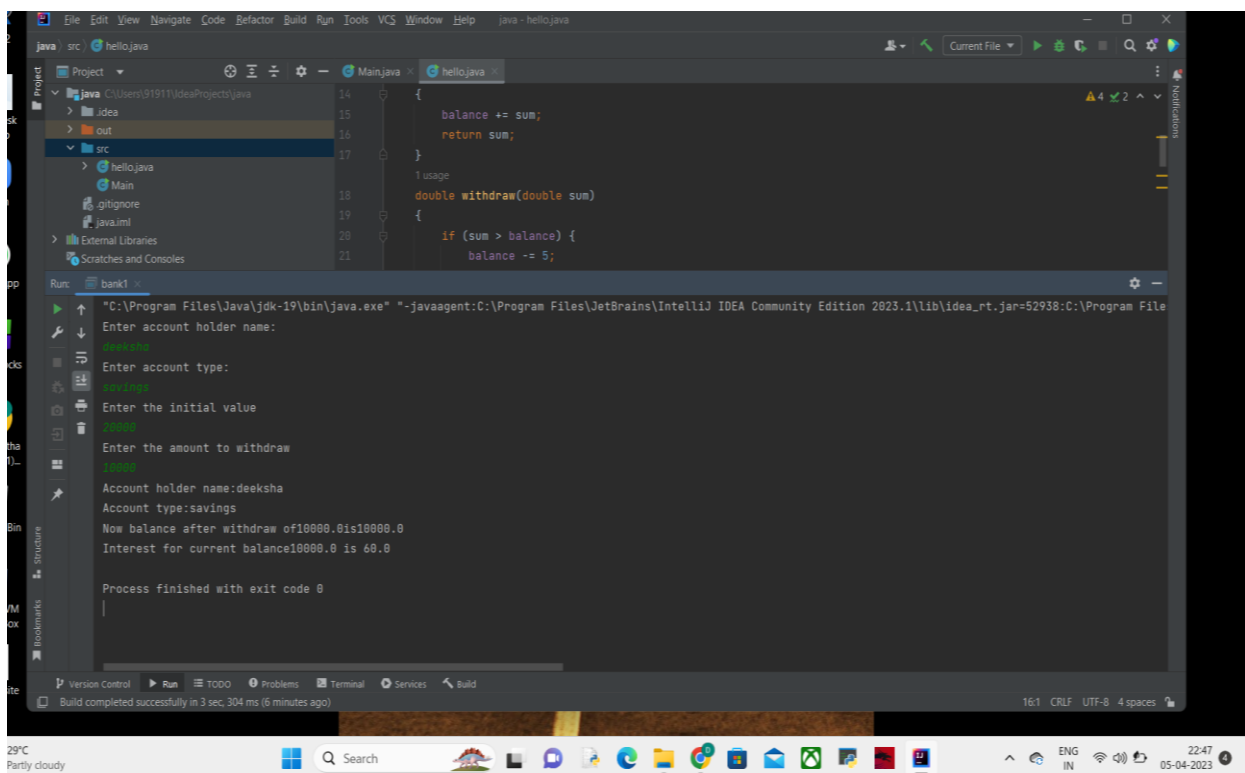
```

System.out.println("Interest for current balance" + A.inquire() + " is " +
A.interest(0.006));
}

catch(Exception e)
{
    System.out.println("Due to character exception");
}
}
}

```

OUTPUT:



3)

```
public class ImplementStrStr {
```

```
    public int strStr(String haystack, String needle) {
```

```

    if (haystack == null || needle == null) {
        return -1;
    }

    if (haystack.equals(needle)) {
        return 0;
    }

    int needleLength = needle.length()
    for (int i = 0; i < haystack.length() - needleLength + 1; i++) {

        if (haystack.substring(i, i + needleLength).equals(needle)) {
            return i;
        }
    }

    return -1;
}
}

```

OUTPUT:

```

Input: haystack = "hello", needle = "ll"
Output: 2

```

```

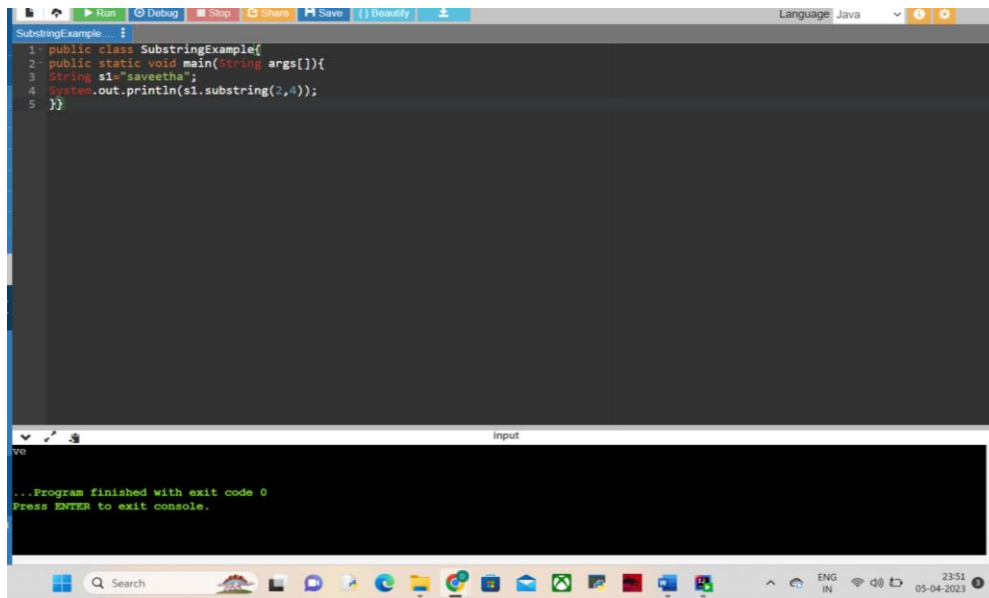
Input: haystack = "aaaaa", needle = "bba"
Output: -1

```

1)

a) public class SubstringExample{

```
public static void main(String args[]){  
String s1="saveetha";  
System.out.println(s1.substring(2,4));  
}}
```



The screenshot shows a Java IDE window titled 'SubStringExample'. The code editor contains the following code:

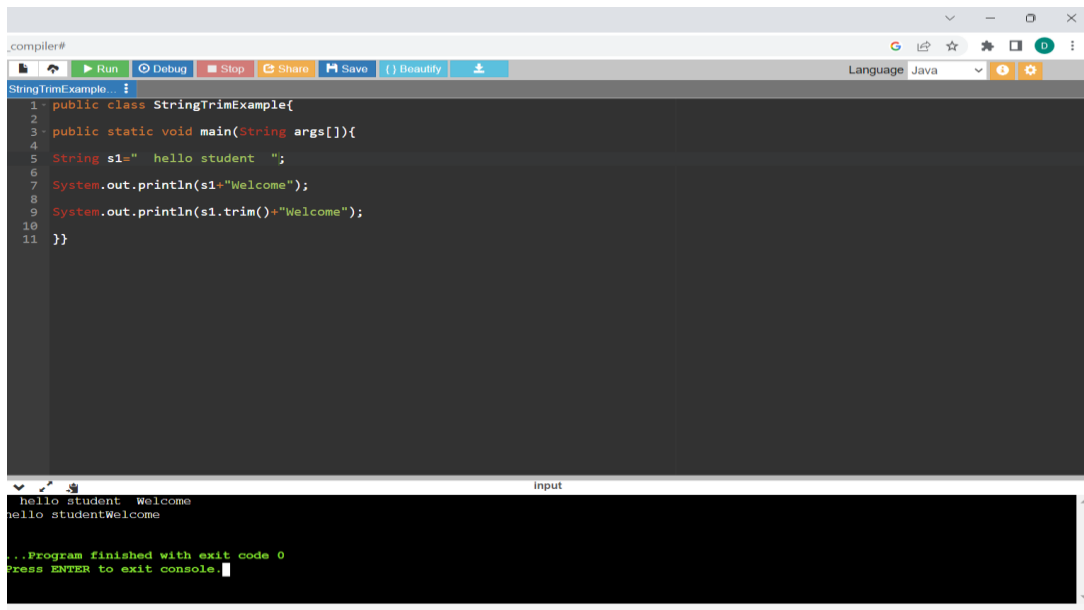
```
1 public class SubStringExample{  
2     public static void main(String args[]){  
3         String s1="saveetha";  
4         System.out.println(s1.substring(2,4));  
5     }  
}
```

Below the code editor is a console window. It displays the output of the program:

```
ve  
...Program finished with exit code 0  
Press ENTER to exit console.
```

The IDE interface includes a top toolbar with buttons for Run, Debug, Stop, Share, Save, and Beautify. The bottom status bar shows the language as Java, the time as 23:51, and the date as 05-04-2023.

```
b) public class StringTrimExample{  
public static void main(String args[]){  
String s1=" hello student  ";  
System.out.println(s1+"Welcome");  
System.out.println(s1.trim()+"Welcome");  
}}
```



The screenshot shows a Java IDE window titled ".compiler#". The code editor displays a file named "StringTrimExample.java" with the following code:

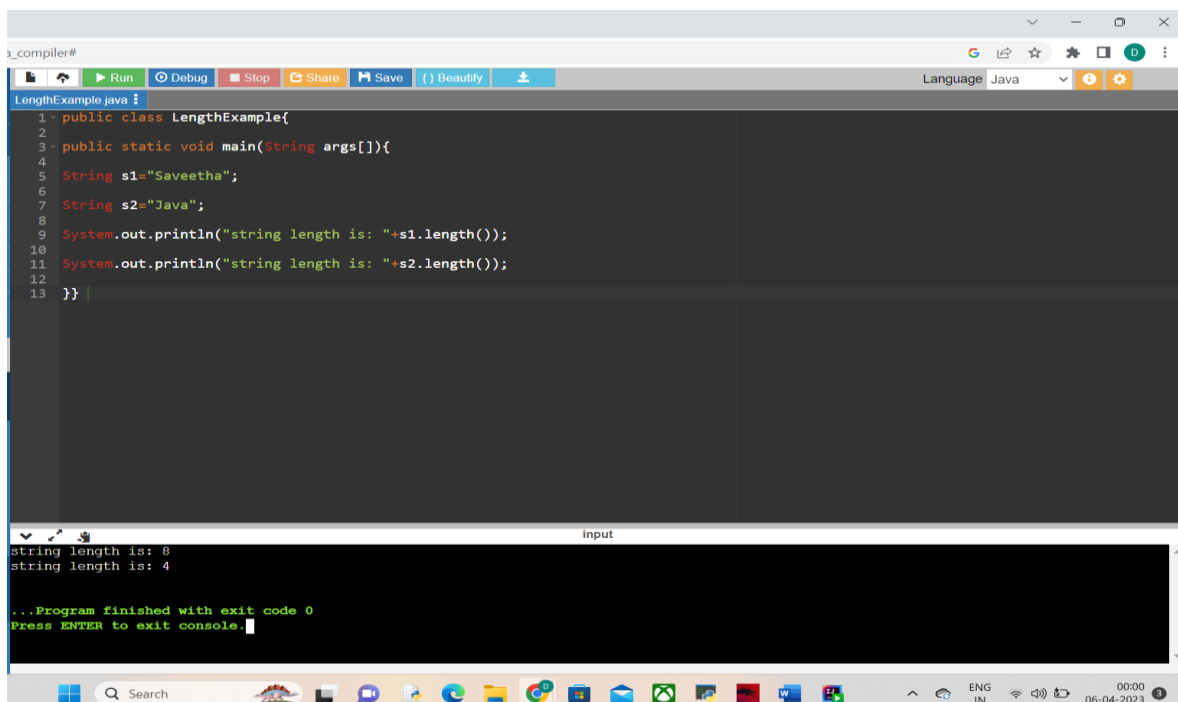
```
1 public class StringTrimExample{
2
3 public static void main(String args[]){
4
5 String s1=" hello student ";
6
7 System.out.println(s1+"Welcome");
8
9 System.out.println(s1.trim()+"Welcome");
10
11 }}
```

The output console at the bottom shows the program's execution:

```
hello student Welcome
hello studentWelcome

...Program finished with exit code 0
Press ENTER to exit console.
```

c) public class LengthExample{
public static void main(String args[]){
String s1="Saveetha";
String s2="Java";
System.out.println("string length is: "+s1.length());
System.out.println("string length is: "+s2.length());
}}



The screenshot shows a Java IDE window titled ".compiler#". The code editor displays a file named "LengthExample.java" with the following code:

```
1 public class LengthExample{
2
3 public static void main(String args[]){
4
5 String s1="Saveetha";
6
7 String s2="Java";
8
9 System.out.println("string length is: "+s1.length());
10
11 System.out.println("string length is: "+s2.length());
12
13 }}
```

The output console at the bottom shows the program's execution:

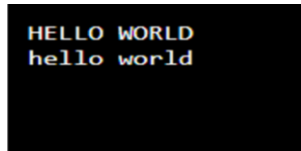
```
string length is: 8
string length is: 4

...Program finished with exit code 0
Press ENTER to exit console.
```

d) `String txt = "Hello World";`

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

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



```
HELLO WORLD
hello world
```

e) `class Teststringcomparison1{`

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

`String s1="deeksha";`

`String s2="deeksha";`

`String s3=new String("deekshitha");`

`String s4="thippabathuni";`

`System.out.println(s1.equals(s2));`

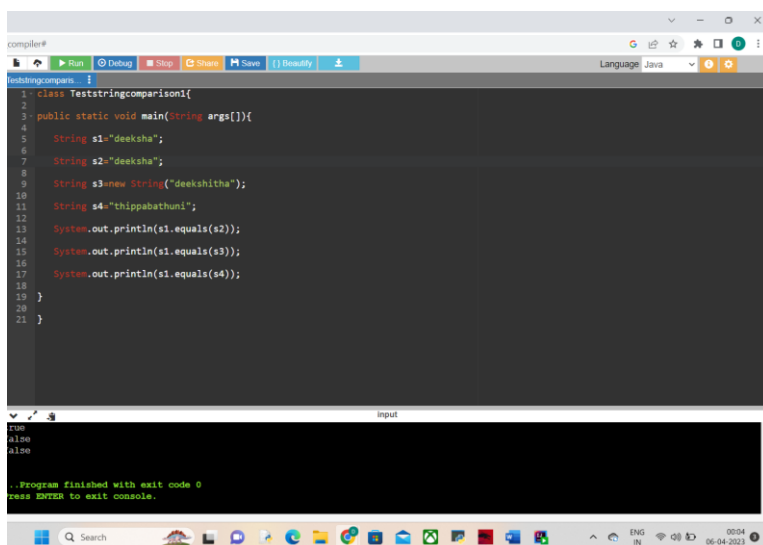
`System.out.println(s1.equals(s3));`

`System.out.println(s1.equals(s4));`

`}`

`}`

OUTPUT:



```
1 class Teststringcomparison1{
2
3 public static void main(String args[]){
4
5     String s1="deeksha";
6     String s2="deeksha";
7
8     String s3=new String("deekshitha");
9
10    String s4="thippabathuni";
11
12    System.out.println(s1.equals(s2));
13
14    System.out.println(s1.equals(s3));
15
16    System.out.println(s1.equals(s4));
17
18 }
19
20
21 }
```

```
true
false
false

..Program finished with exit code 0
press ENTER to exit console.
```


4)

```
import java.io.*;
import java.util.*;
public class lastw {
    public static void main(String[] args){
        int len = 0;
        String x;
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the string :");
        x=sc.nextLine();
        String a= x.trim();

        for (int i = 0; i < x.length(); i++) {
            if (x.charAt(i) == ' ')
                len = 0;
            else
                len++;
        }
        System.out.println("The length of last word is "
            + len);
    }
}
```

OUTPUT:

```
lastw.java
1 import java.io.*;
2 import java.util.*;
3 public class lastw {
4     public static void main(String[] args){
5         int len = 0;
6         String x;
7         Scanner sc=new Scanner(System.in);
8         System.out.println("Enter the string :");
9         x=sc.nextLine();
10        String a= x.trim();
11
12        for (int i = 0; i < x.length(); i++) {
13            if (x.charAt(i) == ' ')
14                len = 0;
15            else
16                len++;
17        }
18        System.out.println("The length of last word is " + len);
19    }
20 }
```

input

```
Enter the string :
Deekshitha
The length of last word is 10

...Program finished with exit code 0
Press ENTER to exit console.
```

5)

```
import java.io.*;
```

```
import java.util.*;
```

```
class factor
```

```
{
```

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

```
    {
```

```
        try
```

```
        {
```

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

```
            int count=0,n,i;
```

```
            System.out.println("Enter the number:");
```

```
            n=sc.nextInt();
```

```
            if(n<=0)
```

```
            {
```

```
                System.out.println("Enter valid number");
```

```
            }
```

```
else
{
for(i=1;i<=n;i++)
{
    if(n%i==0)
    {
        count++;
    }
}

System.out.println("The number of factors:"+count);
}
}
catch(Exception e)
{
    System.out.println("Enter only numbers");
}
}
```

```
factor.java :
1- import java.io.*;
2- import java.util.*;
3- class factor
4- {
5-     public static void main(String args[])
6-     {
7-         try
8-         {
9-             Scanner sc=new Scanner(System.in);
10-             int count=0,n,i;
11-             System.out.println("Enter the number:");
12-             n=sc.nextInt();
13-             if(n!=0)
14-             {
15-                 System.out.println("Enter valid number");
16-             }
17-             else
18-             {
19-                 for(i=1;i<=n;i++)
20-                 {
21-                     if(n%i==0)
22-                     {
23-                         count++;
24-                     }
25-                 }
26-                 System.out.println("The number of factors:"+count);
27-             }
28-         }
29-     }
30- }
```

input

Enter the number:
100
The number of factors:9

...Program finished with exit code 0
Press ENTER to exit console.

23:48
05-04-2023