Aditya Degree Colleges

Java Online Training Coding Test_10 Key

Date: 02-05-2020

Program – 1:

Given a time in 12 -hour AM/PM format, convert it to military (24-hour) time.

Note: Midnight is 12:00:00AM on a 12-hour clock, and 00:00:00 on a 24-hour clock. Noon is 12:00:00PM on a 12-hour clock, and 12:00:00 on a 24-hour clock.

Input Format:

A single String s containing a time in 12 hour clock format (i.e hh:mm:ssAM or hh:mm:ssPM), where 01<=hh<=12 and 00<=mm,ss<=59.

Constraints:

All input times are valid.

Output Format:

Convert and print the given time in 24 hour format, where 00<=hh<=23.

Sample Input:

07:05:45PM

Sample Output:

19:05:45

Testcase1:

Input:

04:25:35PM

Output:

16:25:35

Testcase2:

Input:

12:25:53AM

Output:

00:25:53

Testcase3:

Input:

10:29:59PM

Output:

22:29:59

Testcase4:

Input:

12:55:59PM

Output:

12:55:59

Source Code:

```
import java.util.*;
class TimeConversion
{
        public static void main(String args[])
        {
                Scanner sc=new Scanner(System.in);
                String s,s1,s2,s3,result="";
                int l,h,k;
              s=sc.next();
              l=s.length();
              s1=s.substring(0,l-2);
              s2=s.substring(l-2,l);
              s3=s1.substring(0,2);

              h=Integer.parseInt(s3);
              h=h+12;
             if(s2.equals("AM"))
             {
                 if(h==24)
                 {
                    k=s1.length();
                    s1=s1.substring(2,k);
                     result="00"+s1;
                 }

                   else
                      result=s1;
             }

            else if(s2.equals("PM"))
             {
                 if(h==24)
                        result=s1;
                else{
                        k=s1.length();
                        s1=s1.substring(2,k);
                        result=h+s1;
                   }
             }
          System.out.println(result);
        }
}
```

Program – 2:

Sudeep is well known for his ability in coding in his college. A district wise coding competition is being held in the city. The competition allows the participants to take help from others if they are unable to solve it. Sudeep has taken his friend vijay. The task given in competition is like this: read two strings as an input. you need to check the number of times every character repeated in first string is exactly same as the number of times the same characters repeated in other string. Then you need to print "YES" otherwise we need to print "NO". Now Sudeep asked vijay to do the task. Vijay is dazzled by seeing the code. Now you need to help vijay in solving the code so that they can go through further rounds.

Sample Testcase:

Input:

3 // No of test cases

listen silent

liril river

top pot

Output:

YES

NO

YES

Sample Testcase:

Input:

3

listen silent

liril river

top pot

Output:

YES

NO

YES

Testcase1:

Input:

4

funeral realfun

theeyes thaysee

agentleman elegantman

convers voices

Output:

YES

NO

YES

NO

Testcase2:
Input:
2
schoolmaster theclassroom
astronomer moonstarer
Output:
YES
YES
Testcase3:
Input:
3
ramu murali
raju arju
siva vikas
Output:
NO
YES
NO
Source Code:

```
import java.util.*;
class Prog10_2
{
	public static void main(String args[])
	{	Scanner sc=new Scanner(System.in);
		int testcases;
		testcases=sc.nextInt();
		while(testcases-->0)
		{
		String s1,s2;

		s1=sc.next();
		s2=sc.next();

		char ch1[]=s1.toCharArray();
		char ch2[]=s2.toCharArray();

		Arrays.sort(ch1);
		Arrays.sort(ch2);

		if(Arrays.equals(ch1,ch2))
			System.out.println("YES");
		else
			System.out.println("NO");

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

MCQ_Day10_KEY:

Cloneable interface is avalible in the
A. java.lang
B) java.io
C) java.util
D) java.awt
Answer:A

Predict the output

```
try
{
int a=10.0/0;
int b[]=new int[5];
String s=null;
}
catch(ArithmeticException | NullPointerException e)
{
System.out.println(e);
}
```

A) java.lang.ArithmeticException
B) java.NullPointerException
C) Infinity
D) Comiple time error due to Possible Loss of Precision
Answer:D

To verifiy the positive infinity
A)Double.POSITIVE_INFINITY
B)Double.Postive_INFINITY
C)Integer.POSITIVE_INFINITY
D)Float.positive_INFINITY
Answer:A

throws keyword used for
A) Inform to the compiler about checked Exceptions
B) Inform to the JVM about checked Exceptions
C) Inform to the compiler about unchecked Exceptions
D) Inform to the JVM about unchecked Exceptions
Answer:A

```
class GFG {
    public static void main(String args[])
    {
         Number[] a = new Double[2];
        a[0] =new Integer( 4);
        System.out.println(a[0]);
    }
}
```

A) 4
B) 4.0
C) ArrayStoreException
D) Compile time error -Integer not stored in Number array
Answer:C

The java instanceof operator is used to test whether the object is an instance of the specified type
A) True
B) False
C) No keyword in java
D) None of the above
Answer: A

```
class Simple1{
 public static void main(String args[]){
 Simple1 s=new Simple1();
 System.out.println(s instanceof Simple1);
 }
}
```
A)false
B)true
C)Exception
D)No output
Answer: B

In FileReader (File f)-if the specified File is not found then
A) IOException
B) FileNotFoundException
C) EOFException
D) ClassNotFoundExceptiom
Answer:B

BufferedWriter Class extends
A) Writer
B) InputWriter
C) Buffer
D) No ParentClass
Answer: A

```
import java.io.IOException;
class Testthrows1{
  void m1()throws IOException{
    throw new IOException("device error");//checked exception
  }
  void n()throws IOException{
    m1();
  }
```

```
  void p1(){
   try{
    n();
   }catch(Exception e){System.out.print("exception handled ");}
  }
  public static void main(String args[]){
   Testthrows1 obj=new Testthrows1();
   obj.p1();
   System.out.println("normal flow...");
  }
}
```

A)exception handled normal flow...
B)normal flow
C)device error
D)exception handled
Answer:A

The hasNextLine() method of java.util.Scanner class returns true if there is another line in the input of this scanner
A) True
B) False
C) No suchmethod in Scanner class
D) NOne of the above
Answer:A

throw keyword is used
A) throw the exception explicitly
B) reports the checked exceptions
C) No keyword existed
D) Exception handler
Answer:A

```
public class EndsWithExample{
public static void main(String args[]){
String s1="java training";
System.out.println(s1.endsWith("g"));
System.out.println(s1.endsWith("ng"));
}}
```

A) true false
B) false true
C) true true
D) false false
Answer: C

The java string trim() method
A) eliminates leading spaces.
B) eliminates leading and trailing spaces.
C) eliminates trailing spaces.
D) eleminates all the spaces.
Answer: B

```
public class StringJoinExample2 {
    public static void main(String[] args) {
        String s1="adityagroup";
                int l=s1.length()-s1.replaceAll("a","").length();
                System.out.println(l);
    }
}
```
A) 3
B) 2
C) 1
D) 11
Answer: B

A super class refernce variable refer to sub class Object is
A) Dynamic Members Dispatching
B) Dynamic Method dispatching
C) Comiple time Method Identifiaction
D) Synchronizing the methods
Answer:B

Check the error
```
abstract class A
{
void show()
{
System.out.println("Helloo");
}
}
```
A) At least one abstract method is required in class A
B) Declaration of show method with abstract keyword is required
C) Class A is declared with public
D) No error in the abstract class A
Answer :D

Conversion of primitive data types into Objects possible
A) Wrapper Classes
B) instance Of
C) Clone
D) String
Answer:A

To create user Defined Exception extends
A) Throwable
B) Exception
C) Error
D) Object
Answer: B

Stack Overflow belongs to which of the following class
A) Error
B) Exception
C) VirtualMachine
D) OutOf Memory
Answer:A