

DAILY ONLINE ACTIVITIES SUMMARY

Date:	26-06-2020	Name:	Anvitha Poojary
Sem & Sec	6A	USN:	4AL17CS008
Online Test Summary			
Subject	-		
Max. Marks	-	Score	-
Certification Course Summary			
Course	Cyber security Data structure in C		
Certificate Provider		Duration	
Coding Challenges			
Problem Statement: 1. Write a program to print all permutations of a given string.			
Status: completed			
Uploaded the report in Github		yes	
If yes Repository name		https://github.com/anvithapo99/Daily-Report	
Uploaded the report in slack		yes	

Online test details:

Coding Challenges Details:

1. Write a program to print all permutations of a given string.

Description:

Here is the steps to implement string permutations:

Take out the first char and keep it constant. And permute rest of the characters.
User recursive method call to permute rest of the string except first character.
While making recursive call, we accumulate each character being constant along with recursive call response.

```
public class Permutation
{
    public static void main(String[] args)
    {
        String str = "ABC";
        int n = str.length();
        Permutation permutation = new Permutation();
        permutation.permute(str, 0, n-1);
    }
    private void permute(String str, int l, int r)
    {
        if (l == r)
            System.out.println(str);
        else
        {
            for (int i = l; i <= r; i++)
            {
                str = swap(str,l,i);
                permute(str, l+1, r);
            }
        }
    }
}
```

```

        str = swap(str,l,i);
    }
}

public String swap(String a, int i, int j)
{
    char temp;
    char[] charArray = a.toCharArray();
    temp = charArray[i] ;
    charArray[i] = charArray[j];
    charArray[j] = temp;
    return String.valueOf(charArray);
}
}

```

Output:

Inbox (1,447) - anvithapoojary02 x Online Java Compiler - Online Ja x +

tutorialspoint.com/compile_java_online.php

codingground | Compile and Execute Java Online (JDK 1.8.0)

Fork Project Edit Setting Login

Execute | Share | Source File | STDIN | Result

```
1 public class Permutation
2 {
3     public static void main(String[] args)
4     {
5         String str = "ABC";
6         int n = str.length();
7         Permutation permutation = new Permutation();
8         permutation.permute(str, 0, n-1);
9     }
10    private void permute(String str, int l, int r)
11    {
12        if (l == r)
13            System.out.println(str);
14        else
15        {
16            for (int i = l; i <= r; i++)
17            {
18                str = swap(str,l,i);
19                permute(str, l+1, r);
20                str = swap(str,l,i);
21            }
22        }
23    }
24    public String swap(String a, int i, int j)
25    {
26        char temp;
27        char[] charArray = a.toCharArray();
28        temp = charArray[i] ;
29        charArray[i] = charArray[j];
30        charArray[j] = temp;
31        return String.valueOf(charArray);
32    }
}
```

\$javac Permutation.java

\$java -Xmx128M -Xms16M Permutation

ABC
ACB
BAC
BCA
CBA
CAB

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27-06-2020