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(DEEMED TO BE UNIVERSITY)
Accredited by NAAC of UGC with 'A' Grade

Coding Questions for Interview

Q1. Write a java program to reverse a string.

The user will input a string and the method should return the reverse of that string

- input: hello, output: olleh
- input: hello world, output: dlrow olleh

Q2. Write a java program to check the given string is a palindrome or not.

The user will input a string and we need to print “*Palindrome*” or “*Not Palindrome*” based on whether the input string is a palindrome or not.

- input: madam, output: Palindrome
- input: step on no pets, output: Palindrome
- input: book, output: Not Palindrome

Q3. Write a java program to reverse the order of words in a given string.

The user will input a sentence and we need to reverse the sequence of words in the sentence.

- input: Welcome to ITER, output: ITER to Welcome

Q4. Write a java program to reverse each word in a given string.

The user will input a sentence and we need to reverse each word individually without changing its position in the sentence.

- input: Welcome to java, output: emocleW ot avaj

Q5. Write a java program to remove duplicate characters from a string.

The user will input a string and the method should remove multiple occurrences of characters in the string

- input: csharpcorner, output: csharpone

Q6. Write a program to find all possible substring of a given string.

Here we need to form all the possible substrings from input string, varying from length 1 to the input string length. The output will include the input string also.

- input: abcd , output : a ab abc abcd b bc bcd c cd d

Q7. Write a java program to count the occurrence of each character in a string.

The user will input a string and we need to find the count of each character of the string and display it on console. We won't be counting space character.

input: hello world;

output:

```
h - 1
e - 1
l - 3
o - 2
w - 1
r - 1
d - 1
```

Q8. Write a java program to perform Left circular rotation of an array.

The user will input an integer array and the method should shift each element of input array to its Left by one position in circular fashion.

input: 1 2 3 4 5, output: 2 3 4 5 1

Q9. Write a java program to find if a positive integer is a prime number or not?

The user will input a positive integer and the method should output "*Prime*" or "*Not Prime*" based on whether the input integer is a prime number or not.

- input: 20, output: Not Prime
- input: 17, output: Prime

Q10. Write a java program to find third largest integer in an array using only one loop.

The user will input an unsorted integer array and the method should find the third largest integer in the array.

- input: 3 2 1 5 4, output: 3

Q11. Write a java program to convert a one-dimensional array to a two-dimensional array.

The user will input 1-D array along with the number of rows and columns. The method should convert this 1-D array to a 2-D array(matrix) of given row and column. We will create matrix row wise.

- input: {1, 2, 3, 4, 5, 6} ,2 ,3

output: 1 2 3
4 5 6

Q12. Write a java program to print the following pattern.

```

1
1 2 1
1 2 3 2 1
1 2 3 4 3 2 1
1 2 3 4 5 4 3 2 1

```

Q13. Write a java program to compute the sum of the first n terms ($n \geq 1$) of the series.

$$S = 1 - 3 + 5 - 7 + 9 - \dots$$

Q14. Write a java program to generate and print the first n terms of the Fibonacci numbers using an efficient algorithm.

In this case, you need to find a pair of Fibonacci terms, in each iteration and display them and adjust the preceding term b and the term before the preceding term a . Your program should handle all positive values of n .

Example:

If $n=10$, it will display as: Fibonacci Series is: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34

If $n=11$, it will display as: Fibonacci Series is: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55

Q15. Write a java program to compute the product of two numbers m and n as per the following procedure.

Product procedure

First number = m , second number = n , Product = $m \times n$

case-1:

Let $m=123$, $n=8$ so, $m \times n = 123 \times 8 = 984$

case-2:

Let $m=123$, $n=12$ so, $m \times n = 123 \times 12$ as follows

$$\begin{array}{r}
 123 \\
 \times 12 \\
 \hline
 246 \\
 1230 \\
 \hline
 1476
 \end{array}$$

In short, the process is $123 \times 12 = 123 \times 2 + 123 \times 10 = 1476$.

case-2:

for $123 \times 234 = 123 \times 4 + 123 \times 30 + 123 \times 200 = \text{product}$
