CODING ROUND QUESTION & ANSWERS

	1) Find the distinct elements in a given array. (Assume size of an array n < = 20)
	Sample Input:
•	
	Sample Output:
•	
	Program:

2) Program to sort array in ascending & descending order.	
nput:	
Output:	
Program:	

3) Sort first half in ascending and second half in descending order.
Example 1:
Example 2:
Algorithm:

Program:

4) Print the following pattern pattern	
Input:	
Output:	
Input:	
Output:	
Program:	

5) Print the following pattern pattern	
Input:	
Output:	
Input:	
Output:	
Program:	

6) Print the below pattern
Input:
Output:

Program:		
7) Print the following pattern		
Input:		
Output:		

_	
Program:	
8) Print the below pattern	
Input:	
Output:	

Program:

9) Print the below pattern

Input:	
Output:	
Program:	
10) Print pattern	
Input:	
Output:	

12) Print the transpose of a Matrix:

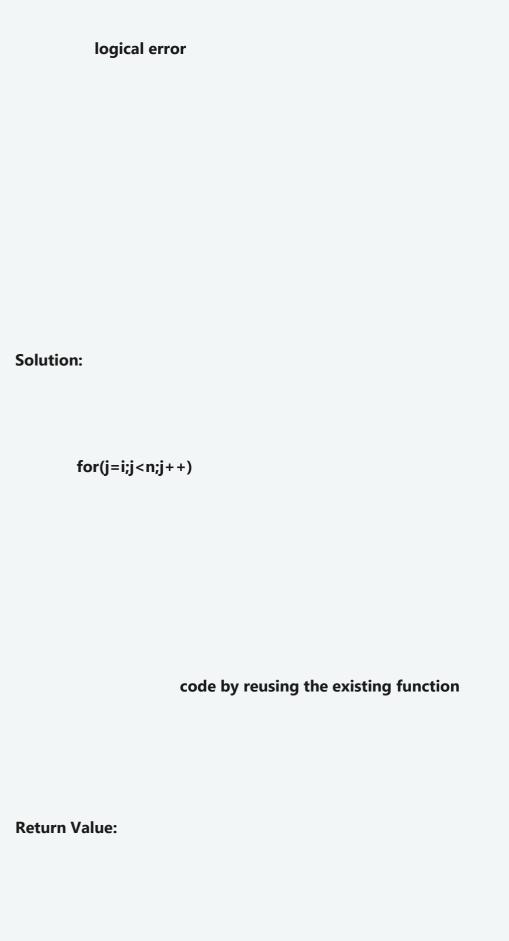
13) Matrix Addition:

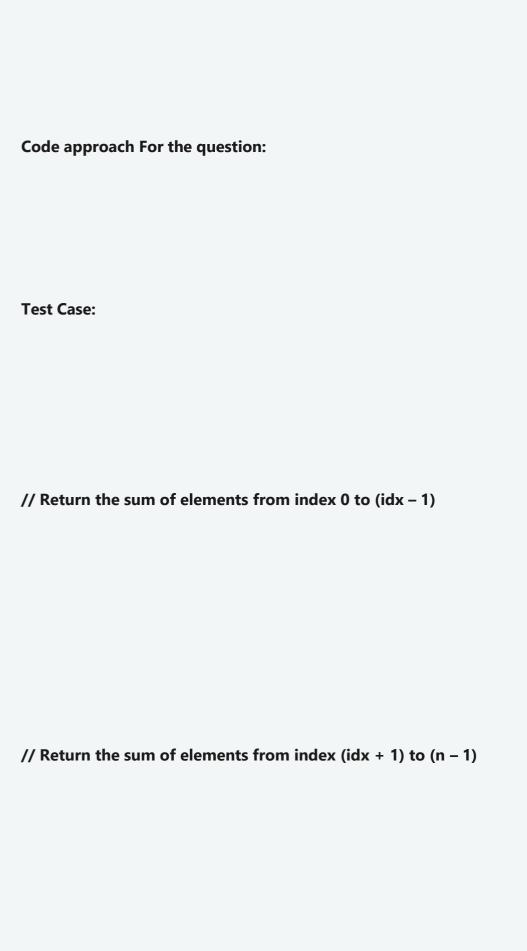
Program:

syntax error

Answer:

int x = 1;



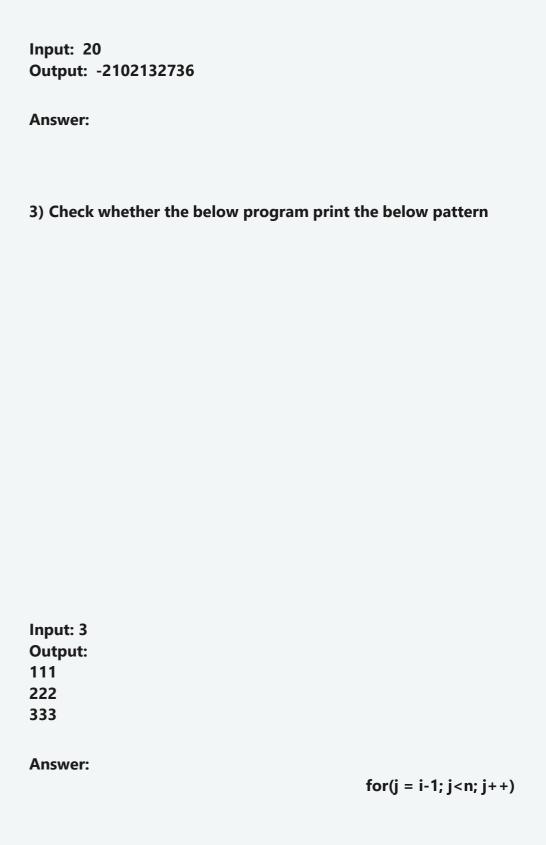


// returns -1 if no equilibrium index found	
•	
Solution:	
// Return the sum of elements from index 0 to (idx – 1)	

```
// returns -1 if no equilibrium index found
  int i;
  for(i = 0; i < n; i++)
    if(left_side_sum(a, n, i) == right_side_sum(a, n, i))
       return i;
    }
  }
  return -1;
```

// Return the sum of elements from index (idx + 1) to (n - 1)

1) Check for syntax error/ logical error and correct the error to get the desired output.
Input: 4 Output: Infinite loop
Answer:
int i = n;
2) Find the factorial of a given number.



4) Find the greatest of three numbers.

Answer:		
if	elseif	else
5) Fix the error, recompile a	and match against the o	output provided.
Corrected program:		
6) Code reuse:		

Answer:			
7) Print the prime nu function.	imbers from an array	up to given value n	by using existing
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2 – AMCAT automata question
Print all the prime numbers which are below the given number separated by comma

3 – AMCAT automata questions
Program to find the GCD of two Integers.
4 – AMCAT automata questions
Program to find out sum of digits of given number.

5 – AMCAT automata questions

Print the pattern If input is 5

1 3*2 4*5*6 10*9*8*7 11*12*13*14*15



Test Cases:		
Test Case 1:		
Explanation:		

7 – AMCAT	automa	ata ques	tions
Input:			

Instructions		
instructions		
Points to note		





Solution:		
Solution:		

Solution:		

Solution:

Solution:			

Solution:		

Solution:





Solution:		

Solution:

Solution:		
Solution:		





1) Count the number of co-prime pairs in an array. (
Input:
Output:
Constraints
Sample Input and Output: Input:
Output:
Input:
Output:
Program:

2) Search for Nth Occurrence		
Input and Output:		

Sample Input and Output: Input:	
Output:	
Program:	

3) Search for an element in an array:
Input and Output:
Sample Input and Output: Input 1: 3
Output 1: Input 1: 3
Output 2:
Program:

4) Second largest number –
Input:
Output:
Constraints
Sample Input and Output: Input:
Output:
Program:

5) Search index in a sorted array:	
Input and Output:	
Sample Input and Output: Input 1:	
Output 1:	
Program:	



1) Count the number of co-prime pairs in an array. (
Input:
Output:
Constraints
Sample Input and Output: Input:
Output:

Input:			
Output:			
Program:			

2) Search for Nth Occurrence		
Input and Output:		
Sample Input and Output: Input:		
Output:		
Program:		

3) Search for an element in an array:
Input and Output:
Sample Input and Output: Input 1: 3
Output 1: Input 1: 3
Output 2:
Program:

4) Second largest number –
Input:
Output:
Constraints
Sample Input and Output: Input:
Output:
Program:

5) Search index in a sorted array:		
Input and Output:		
Sample Input and Output: Input 1:		

Output	1:	
•		

Program: