

DAILY ONLINE ACTIVITIES SUMMARY

Date:	10-06-2020	Name:	ASHIKA
Sem & Sec	6 A	USN:	4AL17CS016
Online Test Summary			
Subject	SSCD		
Max. Marks	30	Score	26
Certification Course Summary			
Course	Python for data science		
Certificate Provider	Cognitive class	Duration	5 hour
Coding Challenges			
Problem Statement:			
1. Write a C Program to print the sum of boundary elements of a matrix			
2. Write a Java program to find the maximum and minimum value node from a circular linked list			
3. Python Program to check whether a given number is a fibonacci number or not			
Status: done(executed)			
Uploaded the report in Github		yes	
If yes Repository name		https://github.com/ASHIKA-05/DAILY-REPORT	

Uploaded the report in slack	yes
------------------------------	-----

SUBJECT : SSCD

The screenshot shows a web browser window with the URL `techgig.com/challenge/result/analysis/K3NLZXFsRVFodU81T3kyQUdmZHpsdz09`. The page has a dark purple header with the text "Test Completed!" and "You have successfully participated in System Software and Compiler Design IA 4." Below this is a "Rate this Test" section with a star rating and a "Click to Rate" link. The main content area is divided into two tabs: "Results" and "Analytics". Under the "Results" tab, there are two boxes. The left box, titled "Test 2 submitted", shows "Analysis" as the category, "Your Score" as 6 / 8. The right box, titled "Test 1 submitted", shows "MCQ" as the category, "Your Score" as 20 / 22.

Test Completed!

You have successfully participated in System Software and Compiler Design IA 4.

Rate this Test

Your Rating: ★★★★★ Click to Rate

Results Analytics

Test 2 submitted

Analysis

Your Score

6 / 8

Test 1 submitted

MCQ

Your Score

20 / 22

CERTIFICATION COURSE

Apps Gmail YouTube Maps Virtual Classroom Virtual Classroom (3) New Messages!

Problem Scores: 1/1 1/1 1/1 1/1 0/1

Module 3 - Python Programming Fundamentals

Learning Objectives
No problem scores in this section

Conditions and Branching (10:14) (1/2) 50%
Practice Scores: 0/1 1/1

Lab-Conditions and Branching
No problem scores in this section

Loops (6:40) (2/2) 100%
Practice Scores: 1/1 1/1

Lab-Loops
No problem scores in this section

Functions (13:28) (0/2)

ONLINE CODING

1. Write a C Program to print the sum of boundary elements of a matrix

Given a matrix, the task is to print the boundary elements of the matrix and display their sum.

Sample Output 1:

Enter M (Rows) and N (Columns): 3, 3

Enter the Elements: 1 2 3 4 5 6 7 8 9

OUTPUT:

The Input Matrix is:

1 2 3

4 5 6

7 8 9

The Boundary Elements are: 1 2 3 4 6 7 8 9

The Sum of Boundary elements of the Matrix is: 40

Sample Output 2:

Enter M (Rows) and N (Columns): 4, 5

Enter the Elements: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

OUTPUT:

The Input Matrix is:

1 2 3 4

5 6 7 8

9 10 11 12

13 14 15 16

17 18 19 20

The Boundary Elements are: 1 2 3 4 5 8 9 12 13 16 17 18 19 20

The Sum of Boundary elements of the Matrix is: 147

```
#include<stdio.h>
```

```
#include<stdlib.h>
```

```
int main()
```

```
{
```

```
    int **a,r,c,i,j;
```

```
    printf("enter the size:");
```

```
    scanf("%d",&r);
```

```
    scanf("%d",&c);
```

```
    a=(int**)malloc(r*sizeof(int*));
```

```
    for(i=0;i<r;i++)
```

```
        *(a+i)=(int*)malloc(c*sizeof(int));
```

```
    printf("enter the matrix:\n");
```

```
    for(i=0;i<r;i++)
```

```
    {
```

```
        for(j=0;j<c;j++)
```

```
        {
```

```
            scanf("%d",&*(a+i)+j);
```

```
        }
```

```
    }
```

```
i=0;int sum1=0;

for(j=0;j<c;j++)

    sum1=sum1+*(*(a+i)+j);


i=r-1;int sum2=0;

if(i!=0)

{

    for(j=0;j<c;j++)

        sum2=sum2+*(*(a+i)+j);

}


j=0; int sum3=0;

for(i=1;i<r-1;i++)

    sum3=sum3+*(*(a+i)+j);


j=c-1; int sum4=0;

for(i=1;i<r-1;i++)

    sum4=sum4+*(*(a+i)+j);


printf("Sum of boundary is %d",sum1+sum2+sum3+sum4);

return 0;

}
```

Output:

```
C:\Users\Hp\Documents\Project4gghkjk.exe
enter the size:3 3
enter the matrix:
1 2 3
4 5 6
7 8 9
Sum of boundary is 40
-----
Process exited after 16.36 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\Hp\Documents\Project4gghkjk.exe
enter the size:4 5
enter the matrix:
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
17 18 19 20
Sum of boundary is 147
-----
Process exited after 70.05 seconds with return value 0
Press any key to continue . . .
```

2. Write a Java program to find the maximum and minimum value node from a circular linked list

Algorithm

Define a Node class which represents a node in the list. It has two properties data and next which will point to the next node.

Define another class for creating the circular linked list and it has two nodes: head and tail.

minNode() will print out minimum value node:

Define variable min and initialize with head's data.

Current will point to head.

Iterate through the list by comparing each node's data with min.

If min > current's data then min will hold current's data.

At the end of the list, variable min will hold the minimum value node.

Print the min value.

maxNode() will prints out maximum value node:

Define variable max and initialize with head's data.

Current will point to head.

Iterate through the list by comparing each node's data with max.

If max < current's data then max will hold current's data.

At the end of the list, variable max will hold the maximum value node.

Print the max value.

```
public class MinMax {  
  
    public class Node{  
  
        int data;  
  
        Node next;  
  
        public Node(int data) {  
  
            this.data = data;  
  
        }  
    }  
  
    public Node head = null;  
  
    public Node tail = null;  
  
    public void add(int data){  
  
        Node newNode = new Node(data);
```

```
if(head == null) {  
    head = newNode;  
    tail = newNode;  
    newNode.next = head;  
}  
else {  
    tail.next = newNode;  
    tail = newNode;  
    tail.next = head;  
}  
}  
  
public void minNode() {  
    Node current = head;  
    int min = head.data;  
    if(head == null) {  
        System.out.println("List is empty");  
    }  
    else {  
        do{  
            if(min > current.data) {  
                min = current.data;  
            }  
            current= current.next;  
        }while(current != head);  
    }
```



```

        System.out.println("Minimum value node in the list: "+ min);
    }
}

public void maxNode() {
    Node current = head;

    int max = head.data;

    if(head == null) {
        System.out.println("List is empty");
    }
    else {
        do{
            if(max < current.data) {
                max = current.data;
            }

            current= current.next;
        }while(current != head);

        System.out.println("Maximum value node in the list: "+ max);
    }
}

```

```

public static void main(String[] args) {
    MinMax cl = new MinMax();

    cl.add(5);

    cl.add(20);
}

```

```

        cl.add(10);

        cl.add(1);

        cl.minNode();

        cl.maxNode();

    }

}

```

Output:

The screenshot shows a web browser at `tutorialspoint.com/compile_java_online.php` with the codingground interface. The 'Execute' tab is active, displaying the following Java code:

```

43     int max = head.data;
44     if(head == null) {
45         System.out.println("List is empty");
46     }
47     else {
48         do{
49             if(max < current.data) {
50                 max = current.data;
51             }
52             current= current.next;
53             }while(current != head);
54
55         System.out.println("Maximum value node in the list: "+ max);
56     }
57 }
58
59 public static void main(String[] args) {
60     MinMax cl = new MinMax();
61     cl.add(5);
62     cl.add(20);
63     cl.add(10);
64     cl.add(1);
65     cl.minNode();
66     cl.maxNode();
67 }
68 }
69
70

```

The 'Result' tab on the right shows the output of the program:

```

$javac MinMax.java

$java -Xmx128M -Xms16M MinMax

Minimum value node in the list: 1
Maximum value node in the list: 20

```

3. Python Program to check whether a given number is a fibonacci number or not

Description:

Input number : 8

Output: 8 is a fibonacci number

Input number : 4

Output: 4 is not a fibonacci number

```
import math
```

```
def checkPerfectSquare(n):
```

```
    sqrt = int(math.sqrt(n))
```

```
    if pow(sqrt, 2) == n:
        return True
    else:
        return False

def isFibonacciNumber(n):
    res1 = 5 * n * n + 4
    res2 = 5 * n * n - 4

    if checkPerfectSquare(res1) or checkPerfectSquare(res2):
        return True
    else:
        return False

num = int(input("Enter an integer number: "))

if isFibonacciNumber(num):
    print ("Yes," , num, "is a Fibonacci number")
else:
    print ("No," , num, "is not a Fibonacci number")
```

output:

```
Python 3.7.6 Shell
File Edit Shell Debug Options Window Help
Python 3.7.6 (tags/v3.7.6:43364a7ae0, Dec 19 2019, 00:42:30) [MSC v.1916 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/Hp/AppData/Local/Programs/Python/Python37/fib.py =====
Enter an integer number: 8
Yes, 8 is a Fibonacci number
>>>
===== RESTART: C:/Users/Hp/AppData/Local/Programs/Python/Python37/fib.py =====
Enter an integer number: 4
No, 4 is not a Fibonacci number
>>> |
```

Ln: 11 Col: 4

Windows taskbar: Search, task icons, system tray (16:38, 10-06-2020, ENG)