DAILY ONLINE ACTIVITIES SUMMARY

Date:	**06-06-2020**	**Name:**	**ASHIKA**
Sem & Sec	**6 A**	**USN:**	**4AL17CS016**

Online Test Summary

Subject	**PAP**		
Max. Marks	**30**	**Score**	**13**

Certification Course Summary

Course	**Python for data science**		
Certificate Provider	**Cognitive class**	**Duration**	**5 hour**

Coding Challenges

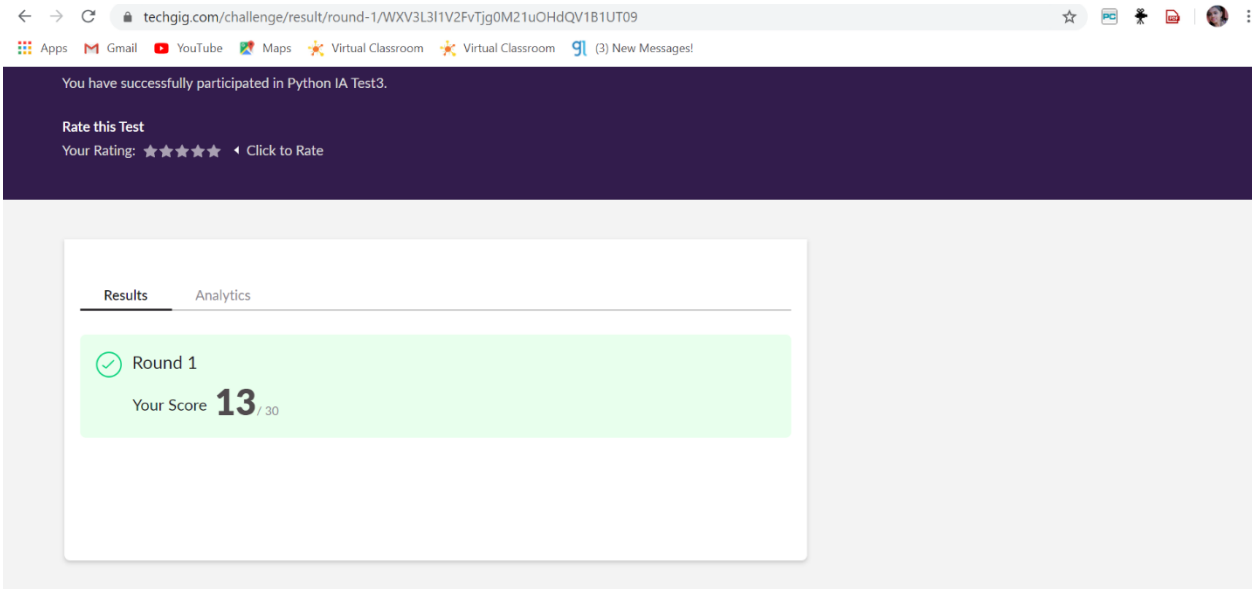
Problem Statement:

1. Write a program in C to rotate an array by N positions.

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: PAP



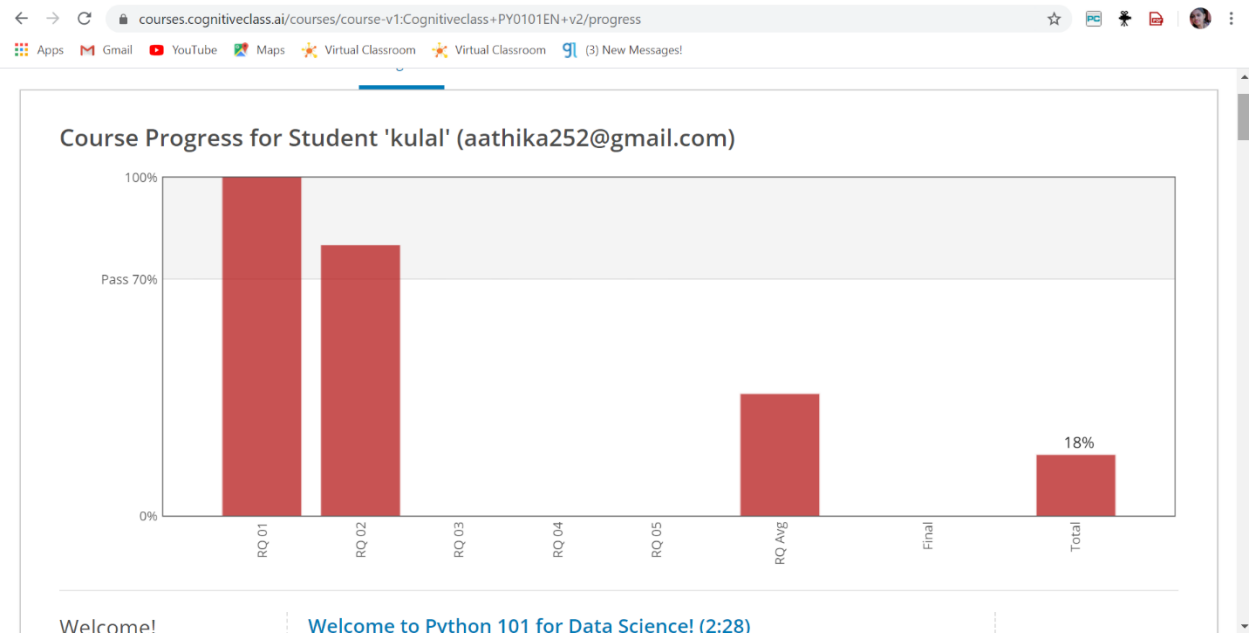
CERTIFICATION COURSE

I HAVE STUDIED MODULE-2 FOR PYTHON FOR DATA SCIENCE

.set

.dictionary

.Example of list and tuples



ONLINE CODEING

1. Write a program in C to rotate an array by N positions.

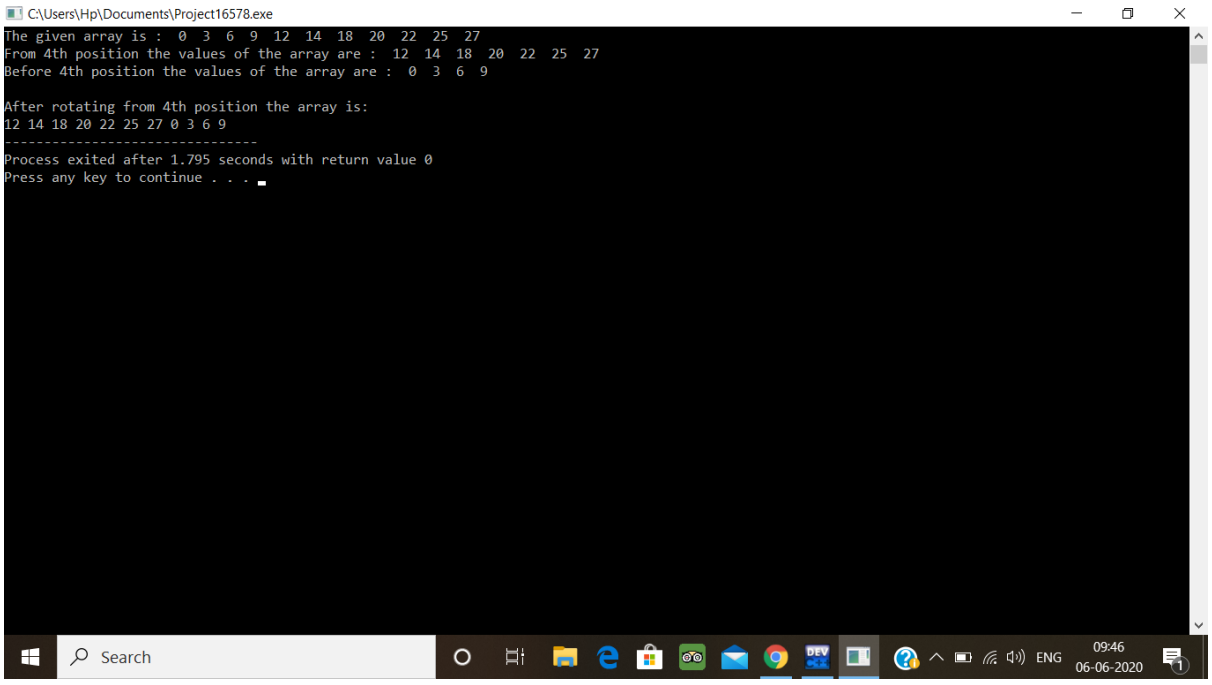
Expected Output :

The given array is : 0 3 6 9 12 14 18 20 22 25 27
Enter the Position N from where you want to rotate: 4
From 4th position the values of the array are : 12 14 18 20 22 25 27
Before 4th position the values of the array are : 0 3 6 9
After rotating from 4th position the array is:
12 14 18 20 22 25 27 0 3 6 9

```
#include <stdio.h>
void shiftArr1Pos(int *arr1, int arrSize)
{
   int i, temp;
    temp = arr1[0];
   for(i = 0; i < arrSize-1; i++)
           {
      arr1[i] = arr1[i+1];
   }
   arr1[i] = temp;
}
void arr1Rotate(int *arr1, int arrSize, int rotFrom)
{
   int i;
   for(i = 0; i < rotFrom; i++)
           {
      shiftArr1Pos(arr1, arrSize);
   }
   return;
}
int main()
{
   int arr1[] = {0,3,6,9,12,14,18,20,22,25,27};
           int ctr = sizeof(arr1)/sizeof(arr1[0]);
   int i;
           printf("The given array is :  ");
           for(i = 0; i < ctr; i++)
           {
           printf("%d  ", arr1[i]);
   }
   printf("\n");
```

```
        printf("From 4th position the values of the array are :  ");
        for(i = 4; i < ctr; i++)
        {
        printf("%d  ", arr1[i]);
    }
    printf("\n");
        printf("Before 4th position the values of the array are :  ");
        for(i = 0; i < 4; i++)
        {
        printf("%d  ", arr1[i]);
    }
    printf("\n");
    arr1Rotate(arr1, ctr, 4);
     printf("\nAfter rotating from 4th position the array is: \n");
    for(i = 0; i<ctr; i++)
        {
       printf("%d ", arr1[i]);
    }
    return 0;
}
```

Output:



2. Write a Python program to perform Cyclic Redundancy Check

CRC uses Generator Polynomial which is available on both sender and receiver side. An example generator polynomial is of the form like x3 + x + 1. This generator polynomial represents key 1011. Another example is x2 + 1 that represents key 101.
Data word to be sent - 100100
Key - 1101 [Or generator polynomial x3 + x2 + 1]

```
def xor(a, b):

    result = []

    for i in range(1, len(b)):
        if a[i] == b[i]:
            result.append('0')
        else:
            result.append('1')

    return ''.join(result)

def mod2div(divident, divisor):

    pick = len(divisor)

    tmp = divident[0 : pick]

    while pick < len(divident):
```

```
            if tmp[0] == '1':

                tmp = xor(divisor, tmp) + divident[pick]

            else:
                tmp = xor('0'*pick, tmp) + divident[pick]

            pick += 1

        if tmp[0] == '1':
            tmp = xor(divisor, tmp)
        else:
            tmp = xor('0'*pick, tmp)

        checkword = tmp

def encodeData(data, key):

        l_key = len(key)

        appended_data = data + '0'*(l_key-1)
        remainder = mod2div(appended_data, key)

        codeword = data + remainder
        print("Remainder : ", remainder)
```

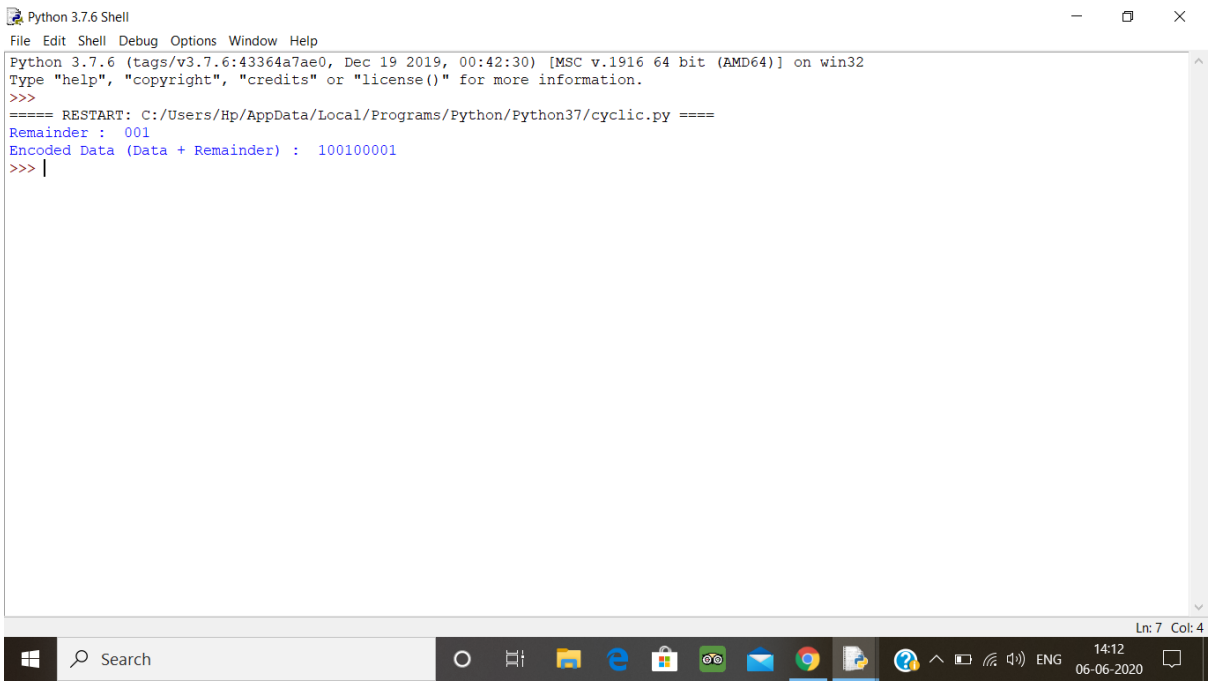
```
        print("Encoded Data (Data + Remainder) : ",


data = "100100"

key = "1101"

encodeData(data, key)
```

output:



3. Description:
Write a Python program to count the number of strings, provided string length is 2 or more and the first and last character are same from a given list of strings.
Eg:
Input
list1['hia', 'aba' , '363']
Output:
Number of strings with first and last cahracter is same: 2

```
def match_words(words):

  ctr = 0
```

```
 for word in words:
   if len(word) > 1 and word[0] == word[-1]:
     ctr += 1
 return ctr


print(match_words(['hia', 'aba' , '363']))
```

output: