

DAILY ONLINE ACTIVITIES SUMMARY

Date:	12-06-2020	Name:	Anvitha Poojary
Sem & Sec	6A	USN:	4AL17CS008
Online Test Summary			
Subject	-		
Max. Marks	-	Score	-
Certification Course Summary			
Course	Introduction to Cloud		
Certificate Provider	COGNITIVE CLASS .ai	Duration	6hr
Coding Challenges			
Problem Statement: 1. Write a Python program to implement Magic Square 2. Python program to print the pattern			
Status: completed			
Uploaded the report in Github		Yes	
If yes Repository name		https://github.com/anvithapo99/Daily-Report	
Uploaded the report in slack		Yes	

Certification course details:

Dashboard | Cognitive Class x Cognitive Class ML0101ENV3 Cer x New Tab

courses.cognitiveclass.ai/certificates/8dc4222e00a84e0baafd5a274f6c602d

This is to certify that

Anvitha Poojary

successfully completed and received a passing grade in

Machine Learning with Python
(ML0101ENV3, provided by Cognitive Class)

A course on cognitiveclass.ai
Powered by IBM Developer Skills Network.

Issued by
Cognitive Class

Issued on:
June 11, 2020

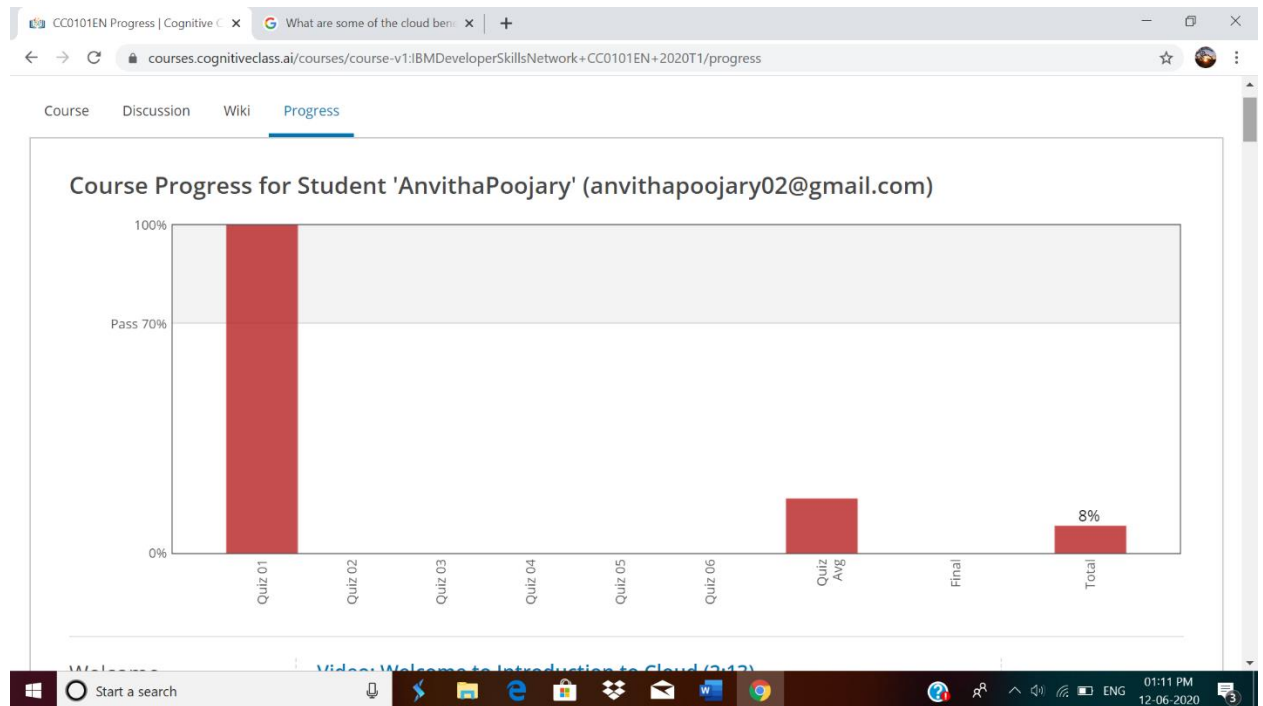
Authenticity of this certificate can be validated by going to:
<https://courses.cognitiveclass.ai/certificates/8dc4222e00a84e0baafd5a274f6c602d>

Waiting for connect.facebook.net...

Start a search

01:13 PM 12-06-2020

Introduction to Cloud



Coding Challenges Details:

1. Write a Python program to implement Magic Square

A magic square of order n is an arrangement of n^2 numbers, usually distinct integers, in a square, such that the n numbers in all rows, all columns, and both diagonals sum to the same constant. A magic square contains the integers from 1 to n^2 .

The constant sum in every row, column and diagonal is called the magic constant or magic sum, M . The magic constant of a normal magic square depends only on n and has the following value:

$$M = n(n^2+1)/2$$

example

Magic Square of size 5

9 3 22 16 15

2 21 20 14 8

25 19 13 7 1

18 12 6 5 24

11 10 4 23 17

Sum in each row & each column = $5 \cdot (5^2+1)/2 = 65$

```
def generateSquare(n):
```

```
    magicSquare = [[0 for x in range(n)]
```

```
                  for y in range(n)]
```

```
    i = n / 2
```

```
    j = n - 1
```

```
    num = 1
```

```
    while num <= (n * n):
```

```

if i == -1 and j == n:

    j = n - 2

    i = 0

else:

    if j == n:

        j = 0

        if i < 0:

            i = n - 1

    if magicSquare[int(i)][int(j)]:

        j = j - 2

        i = i + 1

        continue

    else:

        magicSquare[int(i)][int(j)] = num

        num = num + 1

    j = j + 1

    i = i - 1

print ("Magic Square for n =", n)

print ("Sum of each row or column",n * (n * n + 1) / 2, "\n")

for i in range(0, n):

    for j in range(0, n):

        print('%2d ' % (magicSquare[i][j]),end = "")

        if j == n - 1:

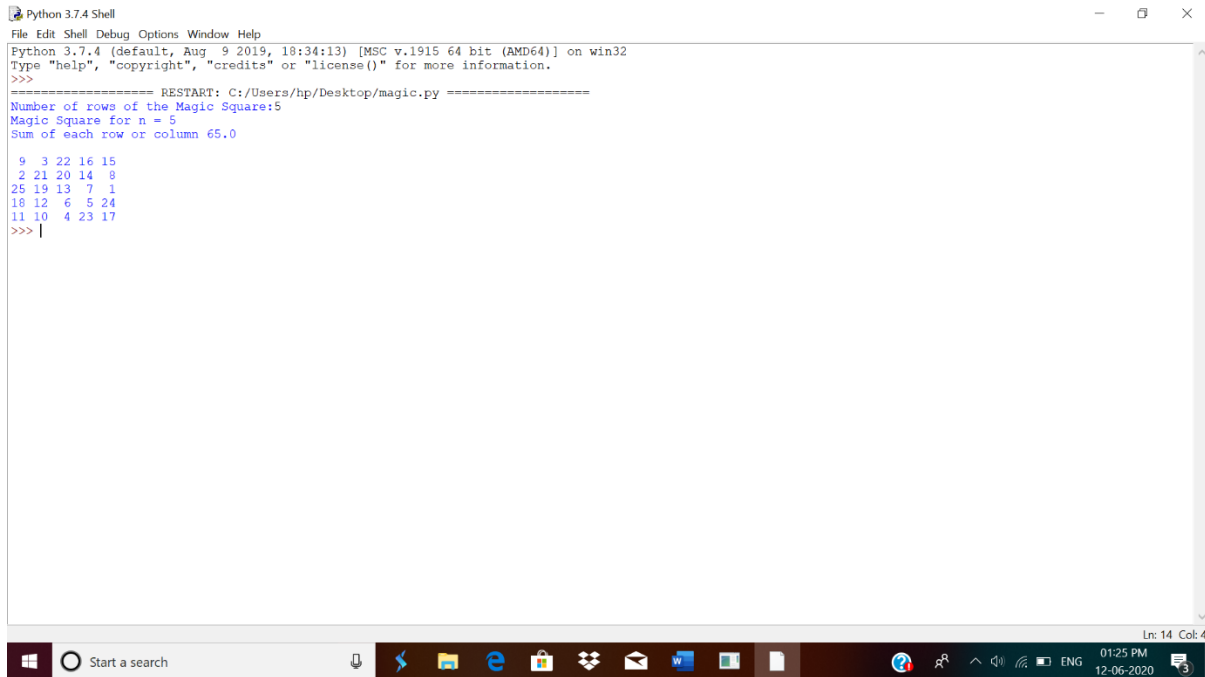
            print()

```

```
n=int(input("Number of rows of the Magic Square:"))
```

```
generateSquare(n)
```

output:



```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (default, Aug 9 2019, 18:34:13) [MSC v.1915 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/hp/Desktop/magic.py =====
Number of rows of the Magic Square:5
Magic Square for n = 5
Sum of each row or column 65.0

 9  3 22 16 15
 2 21 20 14  8
25 19 13  7  1
18 12  6  5 24
11 10  4 23 17
>>> |
```

2. Python program to print the pattern

```

      *
    * *
  * * *
* * * *
* * * * *
  * * * *
    * * *
      * *
        *
```

```
def pattern(n):
```

```
    k = 2 * n - 2
```

```
    for i in range(0, n-1):
```

```
        for j in range(0, k):
```

```
            print(end=" ")
```

```
k = k - 2

for j in range(0, i + 1):

    print("* ", end="")

print("")

k = -1

for i in range(n-1,-1,-1):

    for j in range(k,-1,-1):

        print(end=" ")

    k = k + 2

    for j in range(0, i + 1):

        print("* ", end="")

    print("")
```

pattern(5)

output:

The screenshot shows a Windows 10 desktop environment. At the top, a 'Python 3.7.4 Shell' window is open, displaying the following text:

```
Python 3.7.4 (default, Aug 9 2019, 18:34:13) [MSC v.1915 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/hp/Desktop/star.py =====
          *
        * *
      * * *
    * * * *
  * * * * *
* * * * *
* * * *
  * * *
    * *
      *
        *
          *
>>>
```

The taskbar at the bottom includes the Start button, a search bar, and several pinned application icons: File Explorer, Microsoft Edge, the Microsoft Store, OneDrive, Mail, Google Chrome, and the Windows Mail app. The system tray on the right shows the date and time as 04:34 PM on 12-06-2020, along with icons for network, volume, and power.