

## **DAILY ASSESSMENT FORMAT**

<b>Date:</b>	<b>22-5-20</b>	<b>Name:</b>	<b>MAHESH H</b>
<b>Course:</b>	<b>TCS ION</b>	<b>USN:</b>	<b>4AL17EC048</b>
<b>Topic:</b>	<b>Understand artificial intelligence(part1) Understand artificial intelligence(part2) assessment</b>	<b>Semester &amp; Section:</b>	<b>6<sup>TH</sup>A</b>
<b>Github Repository:</b>	<b>Maheshh</b>		

<b>FORENOON SESSION DETAILS</b>
<b>Image of session</b>

*This is to certify that*

**Mahesh h**

*has successfully completed*

**Career Edge - Knockdown the Lockdown**

*online course offered by TCS iON*

**Start Date: 17 May 2020 | End Date: 22 May 2020**

**Topics:**

- Communication Skills ■ Presentation Skills ■ Soft Skills ■ Career Guidance Framework ■
- Group Discussion Skills ■ Interview Skills ■ Business Etiquette ■ Effective Email Writing ■ T
- Accounting Fundamentals ■ IT Foundational Skills ■ Overview of Artificial Intelligence\* (Sour



## **Understand Artificial Intelligence Part 1:**

- Introduction to AI is concerned with the design of intelligence in artificial device.
- This definition was coined by McCarthy in 1956.
- A Turing Test is a method of inquiry in artificial intelligence (AI) for determining whether or not a computer is capable of thinking like a human being. The test is named after Alan Turing, the founder of the Turing Test and an English computer scientist, cryptanalyst, mathematician and theoretical biologist.
- Application of AI:
- Computer vision.
- Image recognition.
- Robotics.
- Language processing.
- Speech processing.

## **Understand Artificial Intelligence Part 2:**

- Agents operate in an environment and have their own goals to perform.
- Agents perceive its environment through sensors and act upon its environment through actuators/effectors.
- Example for agents:
  - Human –Eyes, Ears, Skin, Taste buds, etc. are sensors. Hands, Fingers, Legs, Mouth, etc. are effectors.
  - Robots –Camera, Infrared, Bumper, etc. are sensors. Grippers, Wheels, Lights, Speakers, etc. are actuators.
- An ideal agent always chooses the action which maximizes its expected performance, given its percept sequence so far. An autonomous agent uses its own experience rather than built-in knowledge of the environment by the designer.
- An agent program maps from percept to action and updates its internal state.

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**Date:**22-2-20  
**Course:** PYTHON  
**Topic:**

**Name:** MAHESH H  
**USN:**4AL17EC048  
**Semester & Section:**6<sup>TH</sup> A

AFTERNOON SESSION DETAILS	
Image of session	

## MySQL: Interactive English Dictionary

3 / 3 | 14min


## Section 15: Data Analysis with Pandas

18 / 18 | 1hr 9min

## Section 16: Numpy

5 / 5 | 25min

### ☒ 121. What is Numpy?


 8min

 Resou

### ☒ 122. Installing OpenCV

 1min

### ☒ 123. Convert Images to Numpy Arrays

 6min

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### ☒ 124. Indexing, Slicing, and Iterating Numpy A

 4min

### ☒ 125. Stacking and Splitting Numpy Arrays

**Report – Report can be typed or hand written for up to two pages.**

## **What is Numpy?**

- Numpy is the fundamental package for scientific computing in Python.
- It is a Python library that provides a multidimensional array object, various derived objects(such as masked arrays and matrices), and an assortment of routines for fast operations on arrays, including mathematical, logical, shape manipulation, sorting, selecting, I/O, discrete Fourier transforms, basic linear algebra, basic statistical operations, random simulation and much more.
- At the core of the Numpy package, is the ndarray object. This encapsulates-dimensional arrays of homogeneous data types, with many operations being performed in compiled code for performance.
- The value '0' is passed when read operation is performed on the image to give gray scale pixel values of the image.
- The value '1' is passed when read operation is performed on the image to give Blue, Green, Red(BGR) pixel values of the image respectively.
- Indexing and Slicing of numpy arrays.

To load a CSV file with this code:

```
Import pandas  
Df1 = pandas.read_csv("supermarkets.csv")
```

And tried to load supermarkets.json file for this exercise using read\_json instead of read\_csv

- To install OpenCV:

```
pip install opencv-python
```

- Open a python and try  
import cv2

