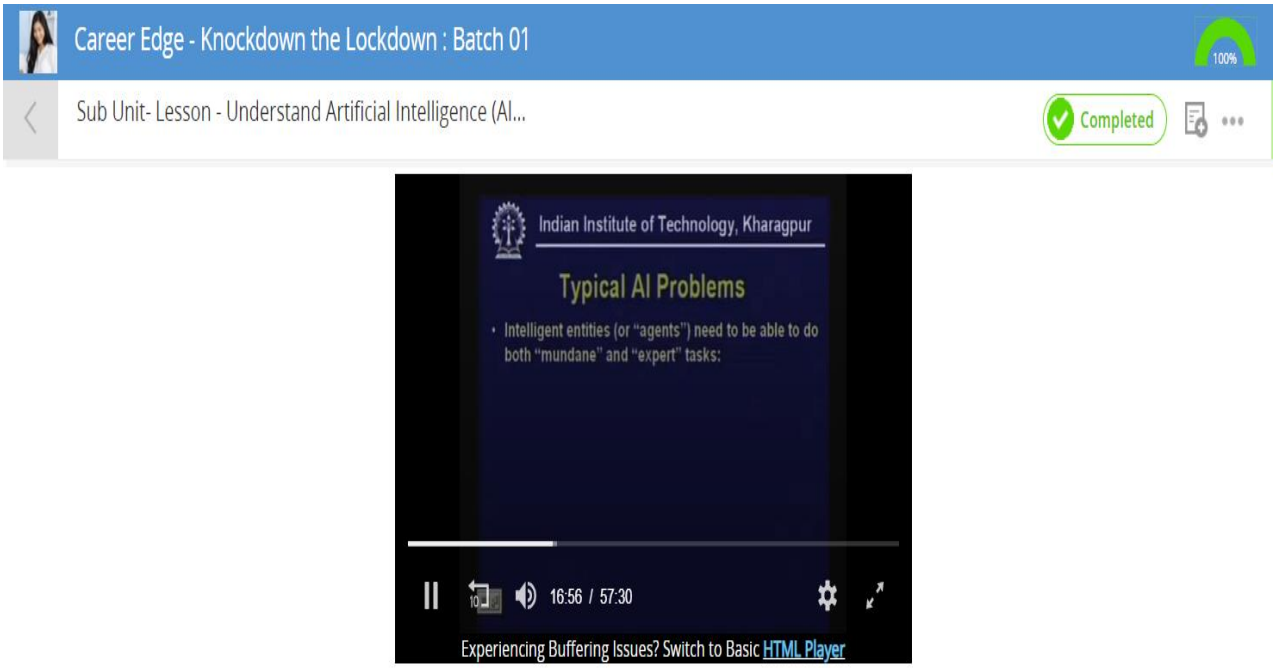
DAILY ASSESSMENT FORMAT

Date:	**22 MAY 2020**	**Name:**	**PAVITHRAN S**
Course:	**TCS ION – CAREER EDGE**	**USN:**	**4AL17EC068**
Topic:	**UNDERSTAND AI – PART 1,2 FINAL ASSESMENT**	**Semester & Section:**	**6TH B**
Github Repository:	**Pavithran**		

FORENOON SESSION DETAILS

Image of session



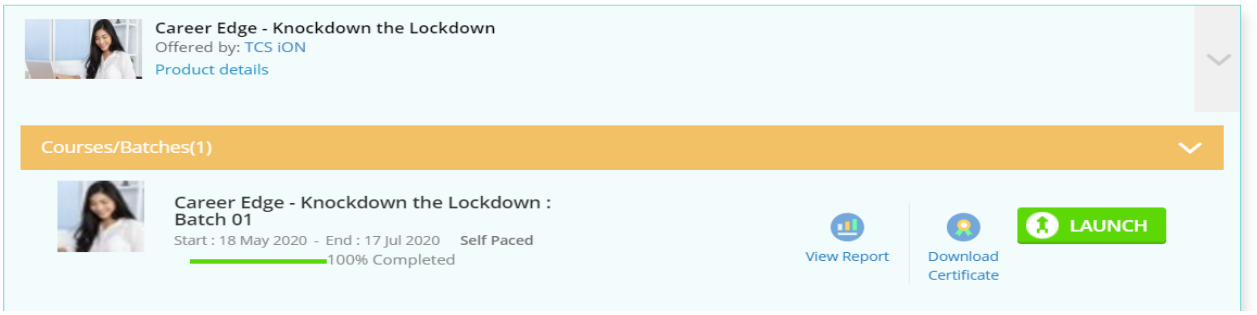
FINAL ASSESMENT MARKS:

Total Marks	Pass Marks	Attempts Taken	Duration	Start Time	View Assessment Analysis	Already cleared
30.0	18.0	01	30 Mins	18 May 2020 12:00 AM TO 17 Jul 2020 12:00 AM	At the End of Assessment	assessment.

My Attempts

Attempted On	Attempted Duration (Submission Time)	Marks Obtained	Status	Action
21 May 2020 01:33 PM	0:20:33 Hrs(01:53 PM)	24.0/30.0	Pass	-

COURSE COMPLETION :



CERTIFICATE OF COMPLETION:

TCS iON | Digital Learning Hub
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This is to certify that

PAVITHRAN S

has successfully completed

Career Edge - Knockdown the Lockdown

online course offered by TCS iON

Start Date: 18 May 2020 | End Date: 21 May 2020

Topics:

- Communication Skills
- Presentation Skills
- Soft Skills
- Career Guidance Framework
- Resume Writing
- Group Discussion Skills
- Interview Skills
- Business Etiquette
- Effective Email Writing
- Telephone Etiquette
- Accounting Fundamentals
- IT Foundational Skills
- Overview of Artificial Intelligence* (Source: NPTEL)

CERTIFIED
Cert. ID.: 4-8328656-1016
Dated: 21 May 2020

Mehul Mehta
Mehul Mehta
Global Delivery Head, TCS iON

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

WHAT IS ARTIFICIAL INTELLIGENCE (AI)?

Back in the 1950s, the fathers of the field Minsky and McCarthy, described artificial intelligence as any task performed by a program or a machine that, if a human carried out the same activity, we would say the human had to apply intelligence to accomplish the task.
That obviously is a fairly broad definition, which is why you will sometimes see arguments over whether something is truly AI or not.

AI systems will typically demonstrate at least some of the following behaviours associated with human intelligence: planning, learning, reasoning, problem solving, knowledge representation, perception, motion, and manipulation and, to a lesser extent, social intelligence and creativity.

WHAT ARE THE USES FOR AI?

AI is ubiquitous today, used to recommend what you should buy next online, to understand what you say to virtual assistants such as Amazon's Alexa and Apple's Siri, to recognise who and what is in a photo, to spot spam, or detect credit card fraud.

WHAT ARE THE DIFFERENT TYPES OF AI?

At a very high level artificial intelligence can be split into two broad types: narrow AI and general AI.Narrow AI is what we see all around us in computers today: intelligent systems that have been taught or learned how to carry out specific tasks without being explicitly programmed how to do so.

This type of machine intelligence is evident in the speech and language recognition of the Siri virtual assistant on the Apple iPhone, in the vision-recognition systems on self-driving cars, in the recommendation engines that suggest products you might like based on what you bought in the past. Unlike humans, these systems can only learn or be taught how to do specific tasks, which is why they are called narrow AI.

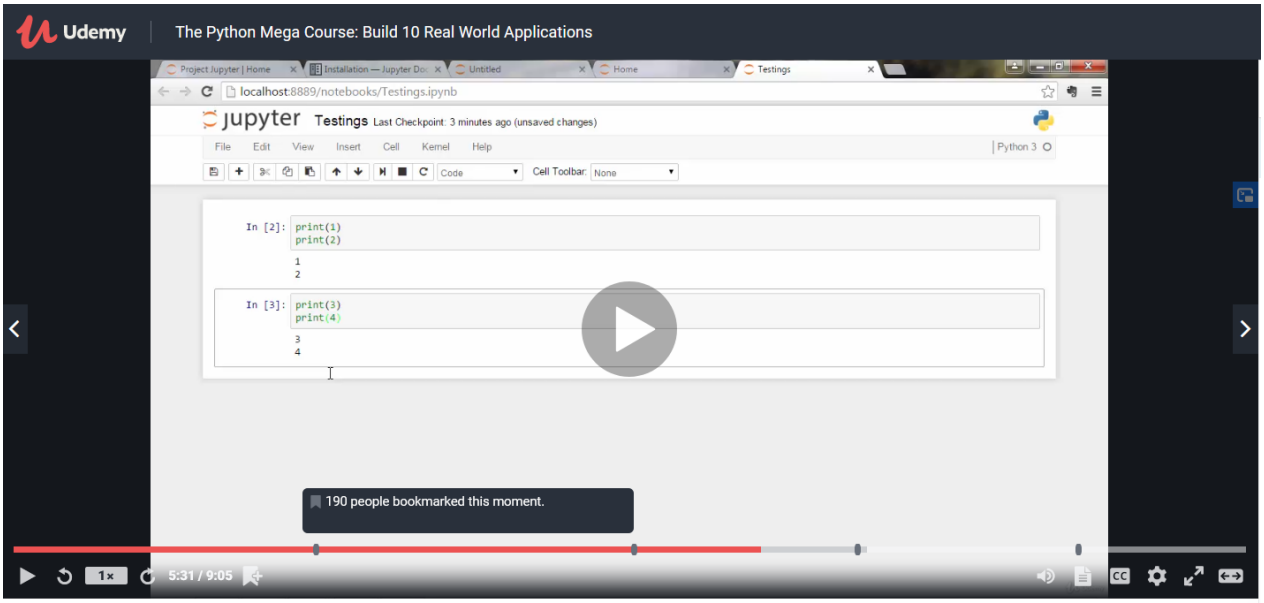
WHAT CAN NARROW AI DO?

There are a vast number of emerging applications for narrow AI: interpreting video feeds from drones carrying out visual inspections of infrastructure such as oil pipelines, organizing personal and business calendars, responding to simple customer-service queries, co-ordinating with other intelligent systems to carry out tasks like booking a hotel at a suitable time and location, helping radiologists to spot potential tumors in X-rays, flagging inappropriate content online, detecting wear and tear in elevators from data gathered by IoT devices, the list goes on and on.

Date:	**22 MAY 2020**	**Name:**	**PAVITHRAN S**
Course:	**PYTHON**	**USN:**	**4AL17EC068**
Topic:	**TUPLES IN PYTHON, LISTS IN PYTHON**	**Semester & Section:**	**6TH B**
Github Repository:	**Pavithran**		

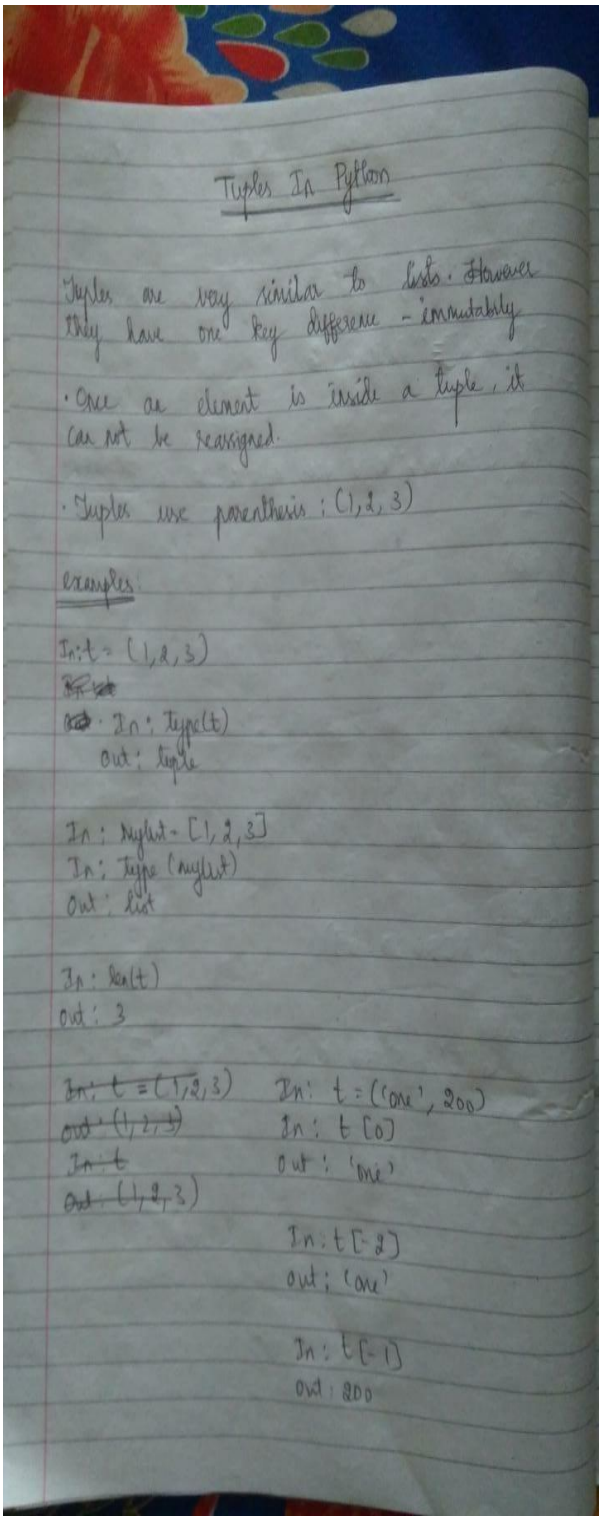
AFTERNOON SESSION DETAILS

Image of session




```
In [40]: t
Out[40]: ('a', 'a', 'b', 'c', 'c', 'c')

In [41]: mylist = [1,2,3]

In [42]: mylist[0]
Out[42]: 1

In [43]: t[0]
Out[43]: 'a'

In [44]: mylist[0] = 500

In [45]: mylist
Out[45]: [500, 2, 3]

In [46]: t[0] = 900
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-46-712031204c4d> in <module>()
----> 1 t[0] = 900

TypeError: 'tuple' object does not support item assignment

In [72]: myset = set()

In [73]: myset
```

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



Tuples In Python

Tuples are very similar to Lists. However they have one key difference - immutability

- Once an element is inside a tuple, it can not be reassigned.
- Tuples use parenthesis : (1, 2, 3)

examples:

In: t = (1, 2, 3)
- In: type(t)
  Out: tuple

In: mylist = [1, 2, 3]
In: type (mylist)
Out: list

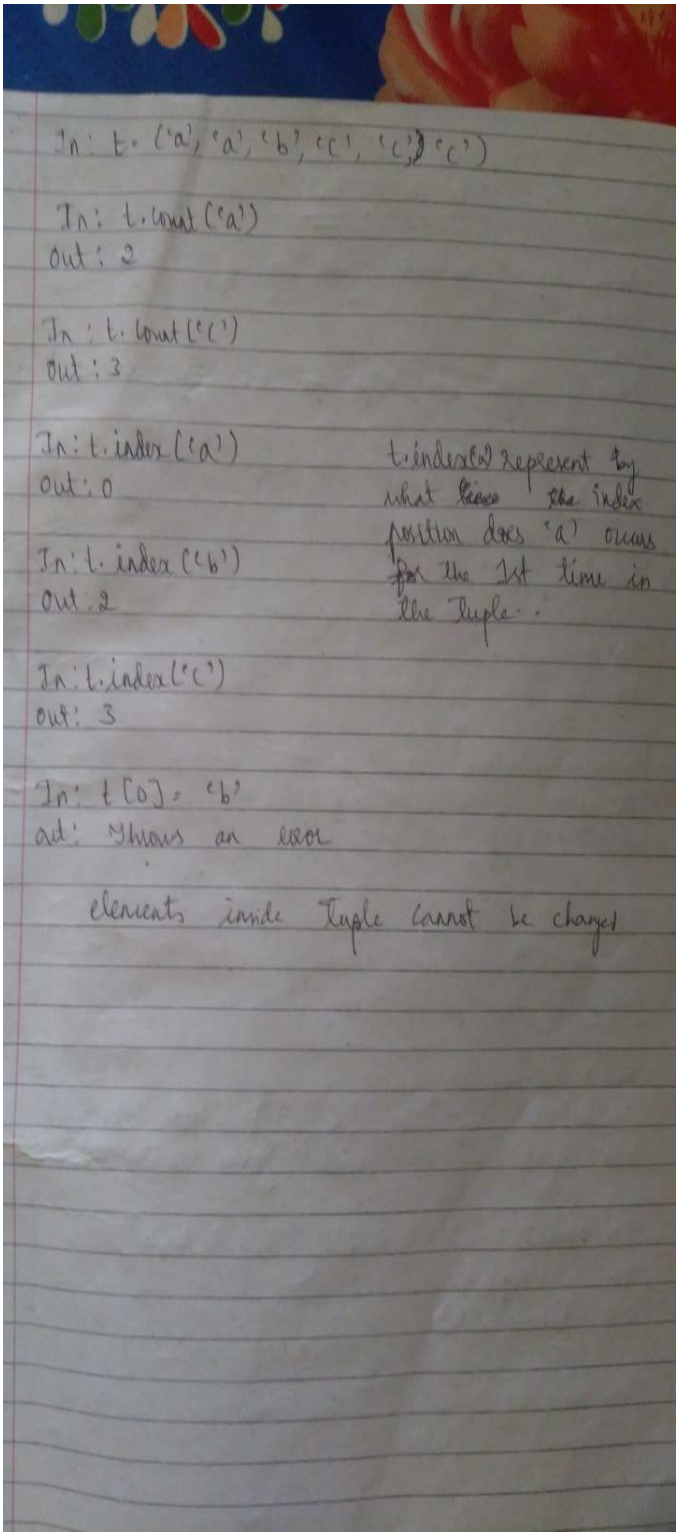
In: len(t)
Out: 3

~~In: t = (1, 2, 3)~~
~~Out: (1, 2, 3)~~
~~In: t~~
~~Out: (1, 2, 3)~~

In: t = ('one', 200)
In: t [0]
Out: 'one'

In: t[-2]
out: 'one'

In: t[-1]
out: 200



In: t = ('a', 'a', 'b', 'c', 'c', 'c')

In: t.count ('a')
Out: 2

In: t.count ('c')
Out: 3

In: t.index ('a')
out: 0

t.index() represent by what is the index position does 'a' occurs for the 1st time in the Tuple.

In: t.index ('b')
Out: 2

In: t.index ('c')
out: 3

In: t [0] = 'b'
out: throws an error

elements inside Tuple cannot be changed

Sets in Python

Sets are unordered collection of unique elements

Meaning there can only be one representative of same object

Examples:

```
In: myset = set()

In: myset
out: set()

In: myset.add(0)
In: myset
out: {0}

In: myset.add(1)
In: myset
out: {0,1}

In: myset.add(0)
In: myset          '0' does not take again
out: {0,1}         it ignores repeated values

In: mylist = [1,1,1,2,2,2,3,3,3,3,4,4]
In: set(mylist)
out: {1,2,3,4}
```

Booleans in python

Booleans are operators that allow you to convey True or False statement

Eg:

```
In: True
out: True

In: true
out: error
     name 'true' is not defined

In: False
Out: False

In: type(False)
Out: bool

In: 1>2
Out: False

In: 1==1
Out: True

In: b
out: error

In: b=None
out: b
```