

5th February, 2024 [Day 1]

08 February 2024 04:18

7th February, 2024 [Day 2]

08 February 2024 04:22

PYTHON

- Set is an unordered data structure --> do not maintain any order of insertion, may or may not resemble input
--> use hash to store the elements
- List denoted as [, ,] is an ordered data structure

◇ Sorting is the rearrangement of numbers in a logical order

- In-place sort means it modifies the original list, it does not return a new sorted list
- returns None since new list was not created
- it cannot be used with other iterables like tuple/string/dictionary/set/map/generators

◇ Reverse works as in-place reverse, it won't work on immutable as string, works on mutable sequences like lists, modify original, returns None[since new list was not created],

◇ Reversed does not work directly on integers[exception of type error], works on mutables, returns an iterator[meaning index, or sequence of items], only list is being reversed

Loop[for loop]

for is an entry controlled loop

-->Logic to reverse a number

12-->21

12/10 --> 2

remainder*10+quotient

STICKY NOTE:

- Points
- ◇ Python functions

9th February, 2024 [Day 3{Hackathon}]

08 February 2024 04:23

12th February, 2024 [Day 4]

08 February 2024 04:23



Title

12 February 2024

18:49

Homework:



Today's Topics:

-
-

Important Points:



Lecture Topic:

During the lecture, take notes here. Insert a sub-page for each lecture topic.

-

Summary

After the lecture, use this space to summarize the main points of this Lecture Topic.

-
-

Title

12 February 2024

18:49

Today's Topics:

-

Announcements:

-

Homework:



Lecture Topic:

During the lecture, take notes here.

-
-

Summary

After class, use this space to summarize the main points of this Lecture Topic.

-
-

Study Questions

After the lecture, create questions based on the notes.



Title

12 February 2024

18:49

Formulas & Theorems Covered Today:



Homework:



Lecture Topic:

During the lecture, take notes here.

Summary

After the lecture, summarize the main points of this lecture topic.

-
-

Title

12 February 2024 18:49

Important Dates:

-

Today's Topics:

-

Important People:

-

Lecture Topic:

During the lecture, take notes here.

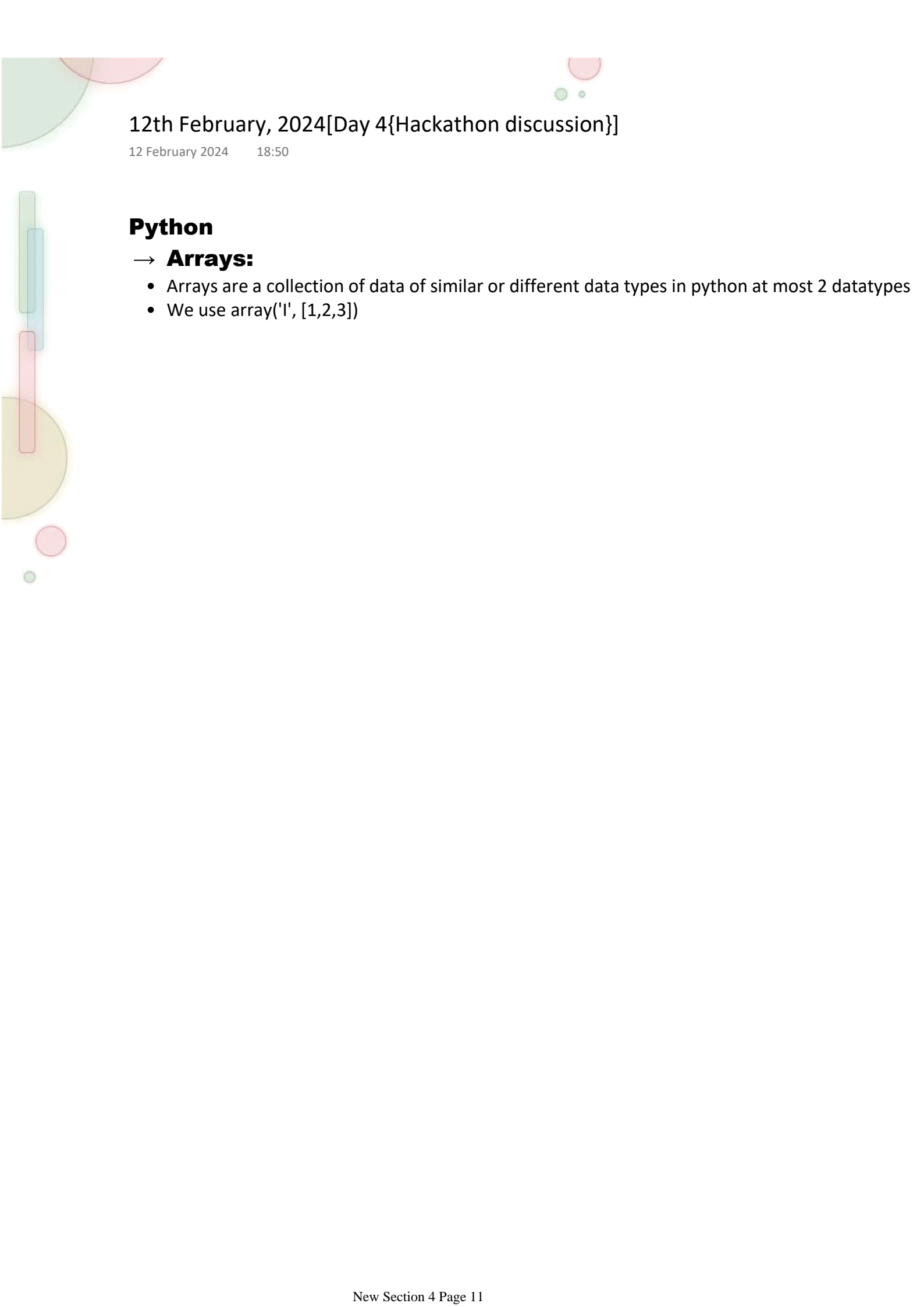
Summary

After the lecture, summarize the main points of this lecture topic.

-
-



12 February 2024 18:49



12th February, 2024[Day 4{Hackathon discussion}]

12 February 2024 18:50

Python

→ **Arrays:**

- Arrays are a collection of data of similar or different data types in python at most 2 datatypes
- We use `array('l', [1,2,3])`



14 February 2024 19:09



PATTERNS in Python

- ▶ Patterns are a way to understand loops
- ▶ Pattern follows certain rules and then prints accordingly

DICTIONARY IN PYTHON

- $[a, 10]$ means $a=10$
- We use maps/dictionary so as to use only that much memory as much is required
- Space complexity is utilised and time complexity too over list
- Less storage required
- It is unordered and mutable by default
- It is heterogeneous, key and value pair
- Can have dictionary in a dictionary
- Concurrent modifications are not allowed

Default dictionary needs to know its datatype beforehand

Ordered dictionary in python

GIT STEPS

1. Git init
2. Git add .
3. Git commit -m "some random message"
4. Git branch -M main
5. Git remote add origin
6. Git push -u origin main

16th February,2024[Day 6]

16 February 2024 18:58

1

16 February 2024 18:58

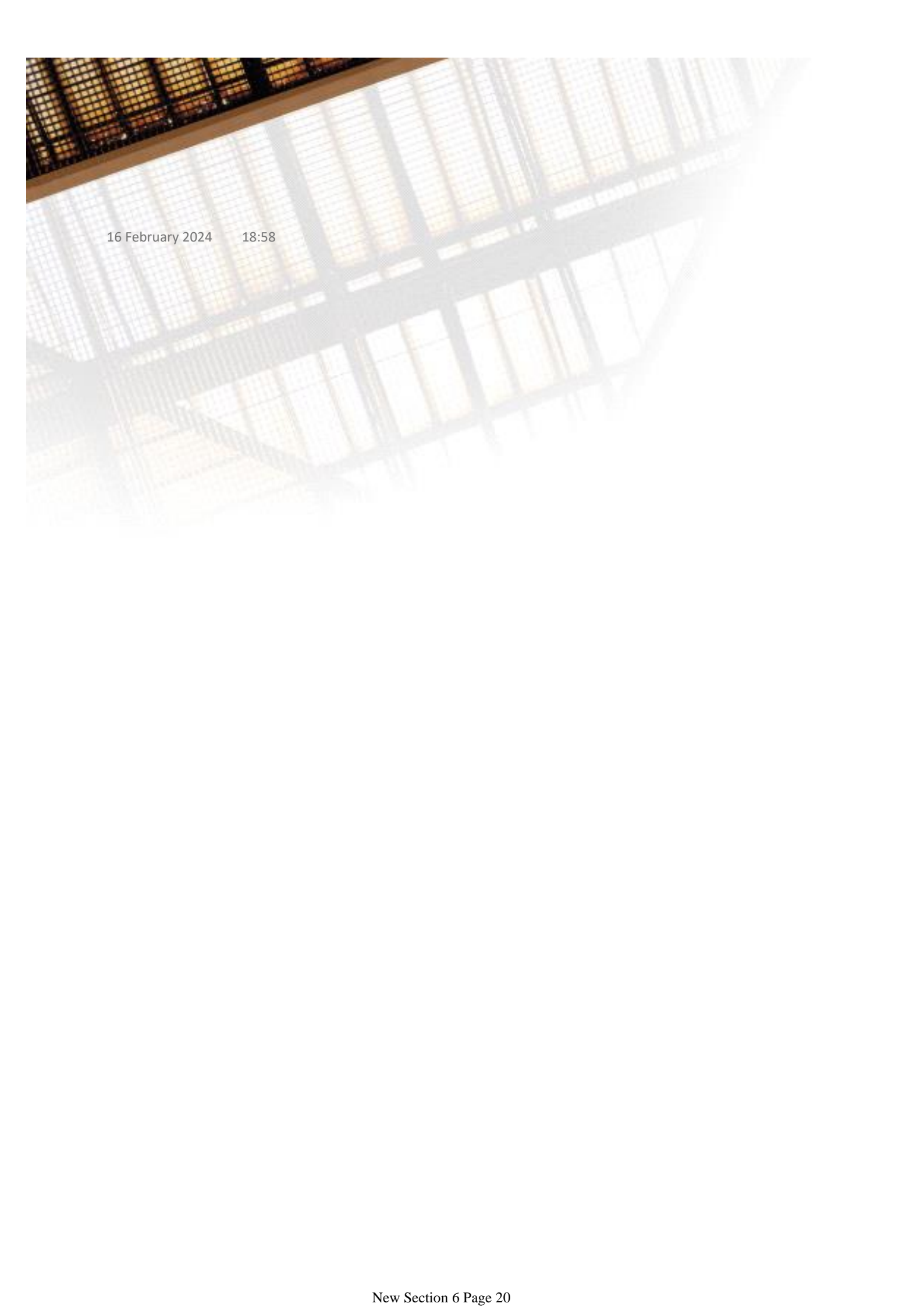
16 February 2024 18:58





16 February 2024

18:58



16 February 2024 18:58

16 February 2024 18:58

16 February 2024 18:59



16 February 2024 18:59





16 February 2024 18:59



16 February 2024 18:59





16 February 2024 18:59



16 February 2024 18:59




16 February 2024

18:59

16th February, 2024[Day 6]

16 February 2024 19:00

Lambda function

- ◇ It is an anonymous function
- ◇ N number of arguments but only one expression
means $a, b, c, \dots, N : a + b * c \dots$ (any operation)N

- ◇ It is a shorter way of writing a function/concise function representation
- ◇ Lambda argument : expression
- ◇ Mostly used where some function is inside another function

Class

- Class / object
 - Almost everything is an object → object → properties & functions
 - Class variables are stored in heap as they are global for the functions of a class
 - Variables used in a function i.e local variables of a function are stored in stack, so that the memory can be used
-
- `__init__()`
 - It is a built in function. Function to assign values
 - Init is automatically called when new object is created

POLYMORPHISM

- Iterators are objects, countable numer
- List tuple dict, sets are iterable objects

19th February, 2024[hack discussion]

23 February 2024 19:02

23rd February, 2024[day8]

23 February 2024 19:02

Polymorphism

Scope

Try Catch block

Pip is python package manager

Beautiful Soup