University of Mohamed Khider
Faculty of Economics, Business and Management Sciences
Subject: Fundamentals of Programming with Python
Level: First Year – Common Core

PW 4

Excercise 1

1. Create a NumPy array called scores from: [12, 8, 15, 10, 7, 14]

2. Print the third student's score.

3. Add a new student's score 9 at the end of the array.

4. Delete the first student's score.

5. print the highest score among students

6. Print the sum and the average of all students' scores

7. Arrange the scores from largest to smallest and print them.

8. Create a new NumPy array called extra from the list [2, 0, 3, 1, 4, 2]

Then add it to the original scores and print the final array

Exercise 2

1. Create the following DataFrame using pandas:

Name	Department	Salary	Years
Ahmed	Sales	50000	3
Leila	Marketing	60000	5
Omar	IT	55000	2
Nora	HR	48000	4

2. Display the "Salary" column

3. Display the row at index 2 (Omar)

4. Display Leila's Salary (row 1, column "Salary")

5. Add a new column "Bonus" = Salary × 0.15

6. Add a new row for "Karim" (IT, Salary=65000, Years=1, Bonus=9750)

7. Delete the "Years" column

8. Delete the row at index 0 (Ahmed)

9. Print the mean and max of Salary