

THE UNIVERSITY OF LAHORE

Faculty of Engineering and Technology

Department of Technology

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Instructor's Name:	<u>Asim Anwar</u>	Subject:	<u>Artificial Intelligence and Optimization</u>
Subject Code:	<u>CS13315</u>	Assignment #:	<u>02</u>
Total Marks:	<u>10</u>	Assigning Date:	<u>29-2-2024</u>
Due Date& Time:	<u>6-3-2024</u>		

Instructions for Candidates

- Provide your original work reflecting your own "understanding".
 - Copying or reproducing others work may lead to zero credits in that particular question(s).
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Python Basics: Import and Scope

Question # 01

In this assignment you'll learn and practice how to use import to bring external code within the direct scope of the project.

Assignment Objectives:

- Use the import statement to import a built-in package in Python.
- Use the import statement to call a function present in another Python file.

Instructions

- Open the file jsgenerator.py present inside project folder.
- Import a built-in package called `json`
- Import the following from a file called employee.py:
 - A function called `details`
 - Variables called `employee_name`, `age` and `title`

4. Implement the `create_dict()` function that returns a dictionary given employee information.

Create and return a dictionary with three key-value pairs where:

- Keys are string variables: `"first_name"`, `"age"` and `"title"` and their respective values are `employee_name`, `age` and `title` variables that we have imported from the `employee` module.
- Be sure to cast the values to the expected types.

5. Use a function called `dumps()` from the `json` module using dot notation and pass the `employee_dict` dictionary that we have created to it.

Return its value to a variable named `json_object`.

The format of the same should look like:

```
```variable = json.dumps(dict)```
```

6. Complete the `write_json_to_file()` function

- Use a built-in function called `open()` and pass the `output_file` argument and `"w"` to it.

Return the value of this function to a variable named `newfile`.

- Call a function called `write()` over this variable `newfile`. Pass the `json_object` variable you created in Step 5 inside it.
- Close this file by calling a built-in function `close()` directly on `newfile`. You don't need to pass any arguments here.

7. Save the files

8. Open the terminal to execute the files

9. Run the code using the command (within project directory)

```
```python3 jsongenerator.py```
```