# **Assignment: Mastering Python Dictionaries and Tuples**

### **Coding Challenge**

Create a dictionary to store details of 3 employees in an organization. Each employee should have the following details:

```
Name: (String)
Age: (Integer)
Department: (String)
Skills: (List of Strings)
```

#### **Example:**

```
employees = {
   "emp1": {"name": "Alice", "age": 30, "department": "HR", "skills": ["Recruitment",
"Communication"]},
   "emp2": {"name": "Bob", "age": 25, "department": "IT", "skills": ["Python", "Networking"]},
   "emp3": {"name": "Charlie", "age": 28, "department": "Finance", "skills": ["Accounting",
"Excel"]}
}
```

#### Instructions:

- 1. Create the dictionary as shown above.
- 2. Add a new skill to one of the employees (e.g., "Leadership" to "Alice").
- 3. Write a program to print the details of all employees in a user-friendly format.

### Multiple Choice Questions (MCQs)

### **Question 1**

#### What is a key feature of dictionaries in Python?

- a) They are immutable.
- b) They store data in key-value pairs.
- c) They cannot grow dynamically.
- d) They are always ordered.

### Question 2

### Which of the following can be used as keys in dictionaries?

- a) Lists
- b) Dictionaries
- c) Tuples
- d) Sets

### **Question 3**

## What will be the output of the following code?

```
colors = ("red", "green", "blue")
print(colors[1])
```

- a) red
- b) green
- c) blue
- d) Error