

Assignment Week 4

Q1. Write a Python function that takes a list of temperatures in Fahrenheit as input and outputs a new list with the temperatures converted to Celsius?

Q2. Write a Python function that takes a list of book titles and their respective authors as input and outputs a new dictionary with the authors as keys and the book titles as values?

Q3. Write a Python function that takes a list of grocery items and their respective prices as input and outputs the total cost of the grocery bill?

Q4. Write a Python function that takes a list of movie titles and their respective ratings as input and outputs a new list with the movies sorted in descending order based on their ratings?

Q5. Write a Python function that takes a list of student names and their respective grades as input and outputs a new dictionary with the student names as keys and their average grade as values?

Q6. Inventory Management: Create a class called "Inventory" that has attributes such as item name, quantity, price, etc. You can then create objects of this class for each item in your inventory and use its methods to update the inventory as items are sold or restocked?

Q7. Employee Management: Create a class called "Employee" that has attributes such as name, age, salary, etc. You can then create objects of this class for each employee in your organization and use its methods to manage employee data, such as updating salaries or tracking employee attendance?

Q8. Banking: Create a class called "Account" that has attributes such as account number, balance, and interest rate. You can then create objects of

this class for each customer's account and use its methods to handle transactions, such as deposits, withdrawals, and interest calculations?

Q9. Medical Records Management: Create a class called "Patient" that has attributes such as name, age, medical history, etc. You can then create objects of this class for each patient and use its methods to manage patient data, such as scheduling appointments or updating medical records?

Q10. Online Ordering: Create a class called "Order" that has attributes such as customer name, order details, total amount, etc. You can then create objects of this class for each order placed on your online store and use its methods to process the order, such as calculating the total amount, generating a receipt, and updating inventory levels?