

Midterm Lab Task Set 1

Problem 1. Using print statement

Write a program that showcases a pattern of the word "CODE" using the letters C, O, D, and E.

Sample Output 1

```
CCCCC  OOOOO  DDDDD  EEEEE
C      O  O   D  D   E
C      O  O   D  D   EEE
C      O  O   D  D   E
CCCCC  OOOOO  DDDDD  EEEEE
```

```
print("CCCCC  OOOOO  DDDD  EEEEE\n"
      "C      O  O   D  D   E\n"
      "C      O  O   D  D   EEE\n"
      "C      O  O   D  D   E\n"
      "CCCCC  OOOOO  DDDD  EEEEE")
```

7OOP1 Project

```
C:\Users\ADMIN\PycharmProjects\PythonProject1\.venv\
CCCCC  OOOOO  DDDD  EEEEE
C      O  O   D  D   E
C      O  O   D  D   EEE
C      O  O   D  D   E
CCCCC  OOOOO  DDDD  EEEEE
```

Problem 2. Using Escape Sequence. Use only 1 print statement for this output

Create a program that prints the following text:

```
Database Record
////////////////////
Name:      John Doe
Email:     john.doe@example.com
University: ABC University
```

Sample Output 1

```
Database Record
////////////////////
Name:      John Doe
Email:     john.doe@example.com
University: ABC University
```

```
< \ print("Database Record\n"
      "\n////////////////////\n"
      "Name:\t\tJohn Doe\n"
      "Email:\t\tjohn.doe@example.com\n"
      "University:\tABC University\n")

7OOP1 Project x

C:\Users\ADMIN\PycharmProjects\PythonProject1\.venv\Scripts\python.exe "C:\
Database Record
////////////////////
Name:      John Doe
Email:     john.doe@example.com
University: ABC University
```

Problem 3. Input Operations

Item Description

Write a program that prompts the user to enter the recipient, message, name, subject, version, discount, status, code, location, age, company name, website, phone, job title, and department. Display the entered values directly on the console in a specific format simulating an email.

```
Dear [recipient], I hope this email finds you well.
[Message]
Subject: [subject]
Sender: [name]
Version: [version]
Discount: [discount]%
Status: [status]
Code: [code]
Location: [location]
Age: [age]
Company: [company name]
Website: [website]
Phone: [phone]
Job Title: [job title]
Department: [department]
```

Sample Output 1

```
Enter the recipient: John
Enter the message: Greetings
Enter the name: Emily
Enter the subject: Proposal
Enter the version: 1.2
Enter the discount: 10.5
Enter the status: A
Enter the code: ABC123
Enter the location: Paris
Enter the age: 35
Enter the company name: XYZ
Enter the website: www.xyz.com
Enter the phone: 123-456-7890
Enter the job title: Manager
Enter the department: Sales
Dear John, I hope this email finds you well.
Greetings
Subject: Proposal
Sender: Emily
Version: 1.2
Discount: 10.50%
Status: A
Code: ABC123
Location: Paris
Age: 35
Company: XYZ
Website: www.xyz.com
Phone: 123-456-7890
Job Title: Manager
Department: Sales
```

```
recipient = input("Enter the recipient: ")
message = input("Enter the message: ")
name = input("Enter the name: ")
subject = input("Enter the subject: ")
version = float(input("Enter the version: "))
discount = float(input("Enter the discount: "))
status = input("Enter the status: ")
code = input("Enter the code: ")
location = input("Enter the location: ")
age = int(input("Enter the age: "))
companyName = input("Enter the company name: ")
website = input("Enter the website: ")
phone = input("Enter the phone: ")
jobTitle = input("Enter the job title: ")
department = input("Enter the department: ")
print(f"Dear {recipient}, I hope this email finds you well.\n"
      f"Message: {message}\n"
      f"Name: {name}\n"
      f"Subject: {subject}\n"
      f"Version: {version}\n"
      f"Discount: {discount:.2f}%\n"
      f"Status: {status}\n"
      f"Code: {code}\n"
      f"Location: {location}\n"
      f"Age: {age}\n"
      f"Company Name: {companyName}\n"
      f"Website: {website}\n"
      f"Phone: {phone}\n"
      f"Job Title: {jobTitle}\n"
      f"Department: {department}\n")
```

```
C:\Users\ADMIN\PycharmProjects\PythonProject1\.venv\Sc
Enter the recipient: john
Enter the message: greetings
Enter the name: emily
Enter the subject: proposal
Enter the version: 1.2
Enter the discount: 10.5
Enter the status: a
Enter the code: abc123
Enter the location: paris
Enter the age: 35
Enter the company name: xyz
Enter the website: www.xyz.com
Enter the phone: 123-456-7890
Enter the job title: manager
Enter the department: sales
Dear john, I hope this email finds you well.
Message: greetings
Name: emily
Subject: proposal
Version: 1.2
Discount: 10.50%
Status: a
Code: abc123
Location: paris
Age: 35
Company Name: xyz
Website: www.xyz.com
Phone: 123-456-7890
Job Title: manager
```

Problem 4. Using Placeholders with % specifier

Write a program that prints the output below:

```
Post Scheduled:
Content: Exciting news! Our new product is launching soon.
Date: 2023-06-30
Time: 10:00 AM
Reach: 2500.50
Engagement: 0.75
Duration: 1.50
Cost: 50.25
Category: N
Status: S
Author Name: John Doe
Author Email: johndoe@example.com
Platform: Facebook
Audience: Targeted
Budget: 1000.00
```

Sample Output 1

```
Post Scheduled:
Content: Exciting news! Our new product is launching soon.
Date: 2023-06-30
Time: 10:00 AM
Reach: 2500.50
Engagement: 0.75
Duration: 1.50
Cost: 50.25
Category: N
Status: S
Author Name: John Doe
Author Email: johndoe@example.com
Platform: Facebook
Audience: Targeted
Budget: 1000.00
```

The program should display various post information using placeholders.

```
content = "Exciting news! Our new product is launching soon"
date = "2023-06-30"
time = "10:00 AM"
reach = 2500.50
engagement = 0.75
duration = 1.50
cost = 50.25
category = 'N'
status = 'S'
authorName = "John Doe"
authorEmail = "johndoe@example.com"
platform = "Facebook"
audience = "Targeted"
budget = 1000.00

print("Post Scheduled")
print("Content: %s\n"
      "Date: %s\n"
      "Time: %s\n"
      "Reach: %.2f\n"
      "Engagement: %.2f\n"
      "Duration: %.2f\n"
      "Cost: %.2f\n"
      "Category: %s\n"
      "Status: %s\n"
      "AuthorName: %s\n"
      "AuthorEmail: %s\n"
      "Platform: %s\n"
      "Audience: %s\n"
      "Budget: %.2f\n" % (content, date, time, reach, engagement, duration, cost, category, status, authorName, authorEmail, platform, audience, budget))
```

```
C:\Users\ADRIAN\PycharmProjects\PythonProject1\venv\Scripts
Post Scheduled:
Content: Exciting news! Our new product is launching soon.
Date: 2023-06-30
Time: 10:00 AM
Reach: 2500.50
Engagement: 0.75
Duration: 1.50
Cost: 50.25
Category: N
Status: S
AuthorName: John Doe
AuthorEmail: johndoe@example.com
Platform: Facebook
Audience: Targeted
Budget: 1000.00

Process finished with exit code 0
```

Problem 5. Type Casting

Item Description

Write a program that takes two numbers (one integer and one float) and take their difference after converting the integer to a float. Finally, print the result in format "The difference is: {result}".

Sample Output 1

```
Enter an integer: 5
Enter a float: 3.14
The difference is: 1.86
```

Sample Output 2

```
Enter an integer: 90
Enter a float: 5.2321
The difference is: 84.77
```

```
integer = int(input("Enter an integer: "))
floating = float(input("Enter a float: "))
result=integer-floating
print(f"The difference is: {result:,.2f}")
```

```
C:\Users\ADMIN\PycharmProjects\Pyth
Enter an integer: 90
Enter a float: 5.2321
The difference is: 84.77
```

-end-