

Mangalino, Chriselle C.

MIDTERM TASK # 2

PROBLEM # 1

Create a countdown timer, where the user is prompted to enter time in seconds and will countdown to zero (set timer delay to 1) using `time.sleep(time_lapse)`. The program should prompt the user to test the timer if the answer is 'y' it will ask the user to enter time in second. If the answer is 'n' it will terminate the timer. Your response to y or n should be case insensitive.

SOURCE CODE:

```
1 import time
2 ans = input("Start the timer[y/n]? ")
3 while ans == "y":
4     my_time = int(input("Enter the time in seconds: "))
5     for t in range(my_time, 0, -1):
6         hours = t // 3600
7         minutes = t % 3600 // 60
8         seconds = t % 60
9         print(f"{hours:02}:{minutes:02}:{seconds:02}")
10        time.sleep(1)
11        print("TIMES UP!")
12
13        ans = input("Try again?")
14
15        print("Bye!!! Thanks for using the program")
16
```

```
C:\Users\COMLAB\PycharmProjects\p
Start the timer[y/n]? y
Enter the time in seconds: 10
00:00:10
00:00:09
00:00:08
00:00:07
00:00:06
00:00:05
00:00:04
00:00:03
00:00:02
00:00:01
TIMES UP!
Try again?
```

```
Try again?y
Enter the time in seconds: 10
00:00:10
00:00:09
00:00:08
00:00:07
00:00:06
00:00:05
00:00:04
00:00:03
00:00:02
00:00:01
TIMES UP!
Try again?
```

```
Try again?  
Bye!!! Thanks for using the program
```

PROBLEM # 2

Create an $n \times n$ Multiplication table using Nested FOR Loop. The user must enter the number of rows and columns that will be displayed in the Table.

SOURCE CODE:

```
How many rows: 10  
How many cols: 10  
Multiplication Table:  
1  2  3  4  5  6  7  8  9  10  
2  4  6  8  10 12 14 16 18 20  
3  6  9  12 15 18 21 24 27 30  
4  8  12 16 20 24 28 32 36 40  
5  10 15 20 25 30 35 40 45 50  
6  12 18 24 30 36 42 48 54 60  
7  14 21 28 35 42 49 56 63 70  
8  16 24 32 40 48 56 64 72 80  
9  18 27 36 45 54 63 72 81 90  
10 20 30 40 50 60 70 80 90 100
```

#2

```
How many rows: 3  
How many cols: 5  
Multiplication Table:  
1  2  3  4  5  
2  4  6  8  10  
3  6  9  12 15
```