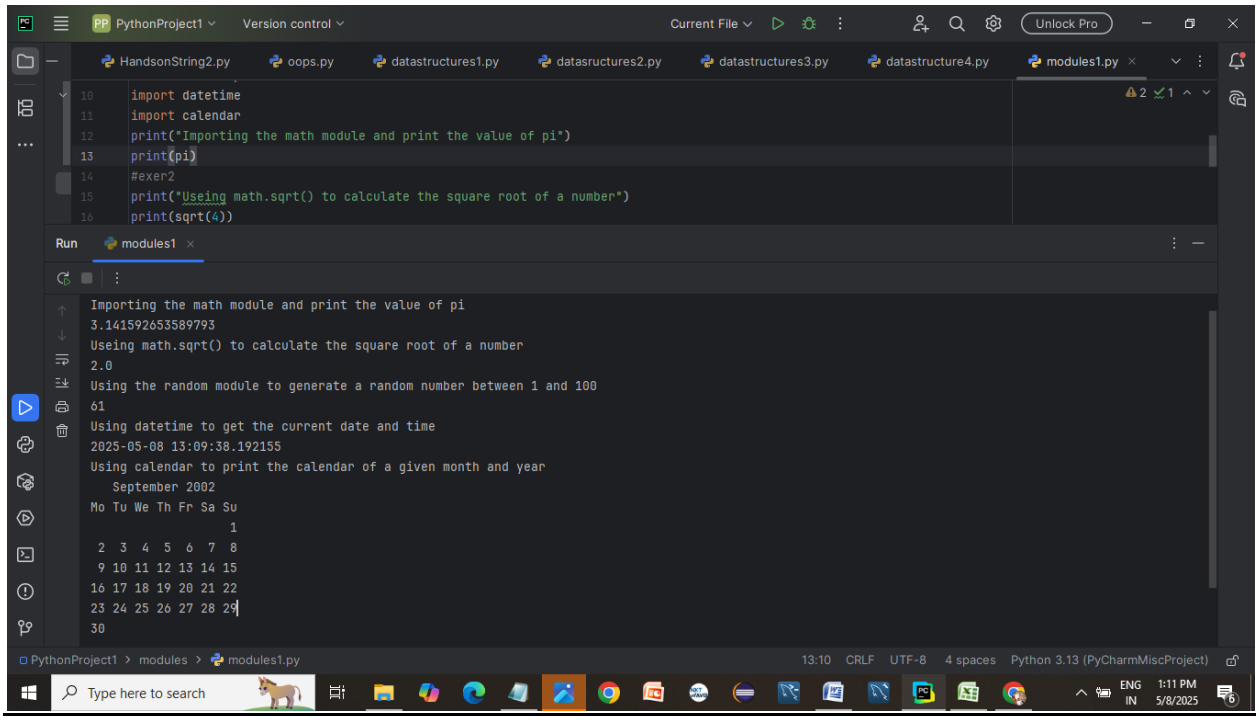
Hands-on_modules

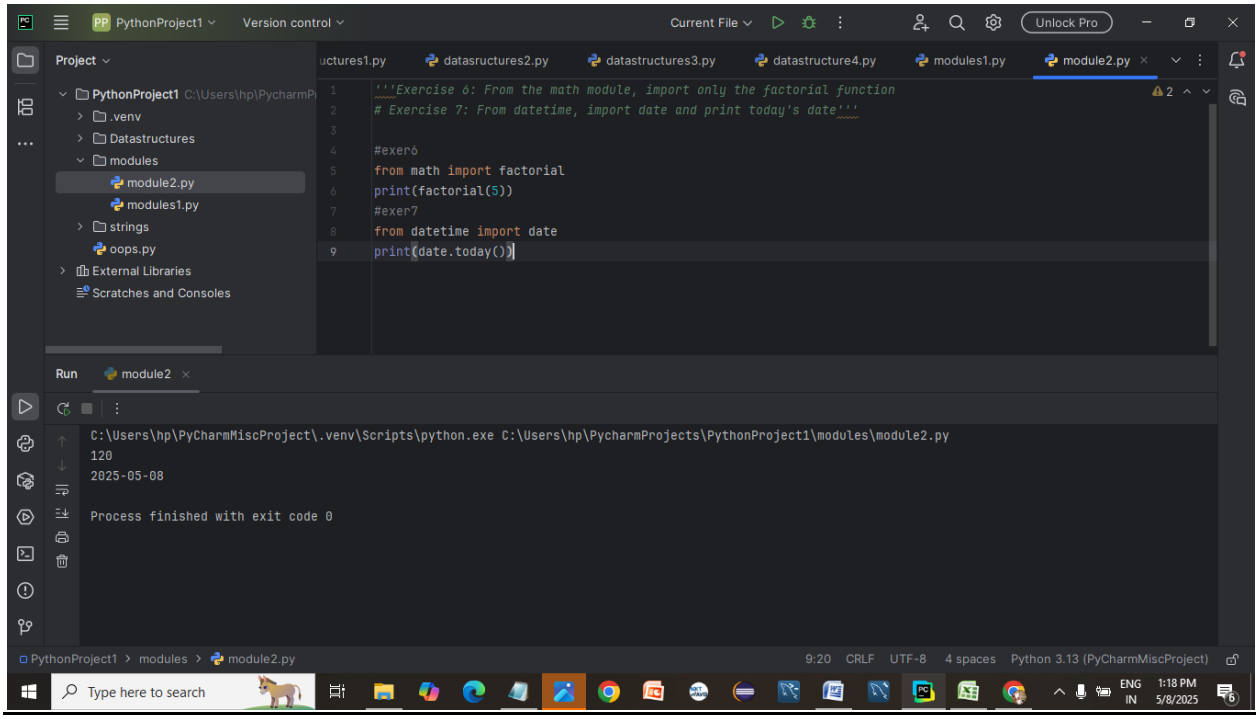
```
''' Exercise 1: Import the math module and print the value of pi
# Exercise 2: Use math.sqrt() to calculate the square root of a number
# Exercise 3: Use the random module to generate a random number between 1 and
100
# Exercise 4: Use datetime to get the current date and time
# Exercise 5: Use calendar to print the calendar of a given month and year'''

#exer1
from math import pi,sqrt
from random import randint
import datetime
import calendar
print("Importing the math module and print the value of pi")
print(pi)
#exer2
print("Useing math.sqrt() to calculate the square root of a number")
print(sqrt(4))
#exer3
print("Using the random module to generate a random number between 1 and
100")
print(randint(1,100))
#exer4
print("Using datetime to get the current date and time")
print(datetime.datetime.now())
#exer5
print("Using calendar to print the calendar of a given month and year")
print(calendar.month(2002,9))
```

Output)



```python
'''Exercise 6: From the math module, import only the factorial function
# Exercise 7: From datetime, import date and print today's date'''

#exer6
from math import factorial
print(factorial(5))
#exer7
from datetime import date
print(date.today())
```

Output



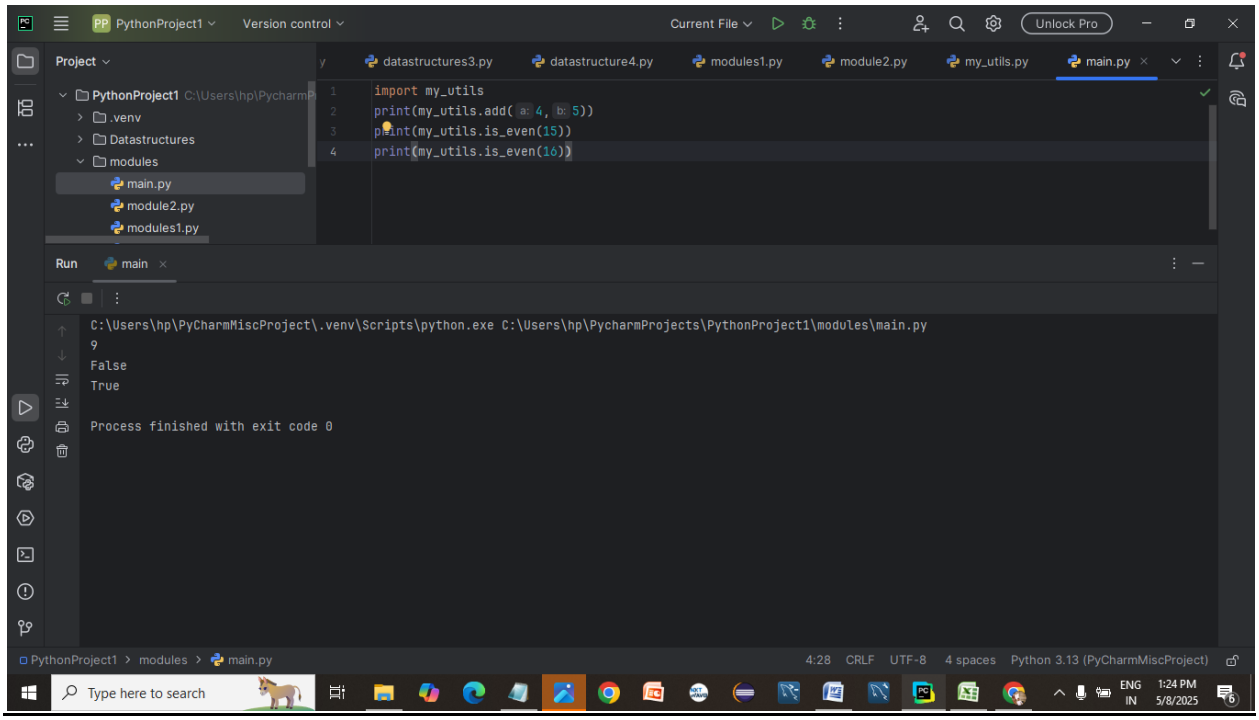
```python
''' Exercise 8: Create a Python file called `my_utils.py` with a function
add(a, b)
# Exercise 9: Import `add` from `my utils` in another script and use it
# Exercise 10: Add another function to `my_utils.py` (e.g., is_even) and use
it in your main file'''

#exer8
def add(a,b):
    return a+b
def is_even(n):
    if(n%2==0):
        return True
    else:
        return False
```

File : my_utils.py

```python
import my_utils
print(my_utils.add(4,5))
print(my_utils.is_even(15))
print(my_utils.is_even(16))
```

File: main.py

Output 0



```python
'''Exercise 11: Use the os module to print the current working directory
# Exercise 12: Use the sys module to print command-line arguments
# Exercise 13: Use time.sleep() to delay execution for 3 seconds
# Exercise 14: Use dir() on the math module to list all available functions
# Exercise 15: Use help() on a specific function like random.randint'''
#exer11
import os
print(os.getcwd())
#exer12
import sys
print("command line args: ",sys.argv)
#exer13
import time
print("going to sleep")
time.sleep(10)
print("slept for 10 secs")
#exer14
import math
print(dir(math))
#exer15
import random
help(random.randint)
```

Output