Assignment -2

Python Programming

Assignment Date	29 September 2022
Student Name	Emmanuel.A
Student Roll No	812419104017
Maximum Marks	2

Question-1:

Python program to do arithmetical operations in IDLE

Solution:

```
# This function adds two numbers
def add(x, y):
    return x + y
# This function subtracts two numbers
def subtract(x, y):
    return x - y
# This function multiplies two numbers
def multiply(x, y):
    return x * y
# This function divides two numbers
def divide(x, y):
    return x / y
print("Select operation.")
print("1.Add")
print("2.Subtract")
```

```
print("3.Multiply")
print("4.Divide")

while True:
        # take input from the user
        choice = input("Enter choice(1/2/3/4): ")

        # check if choice is one of the four options
        if choice in ('1', '2', '3', '4'):
        num1 = float(input("Enter first number: "))
        num2 = float(input("Enter second number: "))

        if choice == '1':
        print(num1, "+", num2, "=", add(num1, num2))

        elif choice == '2':
        print(num1, "-", num2, "=", subtract(num1, num2))

        elif choice == '3':
        print(num1, "*", num2, "=", multiply(num1, num2))

        elif choice == '4':
        print(num1, "/", num2, "=", divide(num1, num2))

        # check if user wants another calculation
        # break the while loop if answer is no
        next_calculation = input("Let's do next calculation? (yes/no): ")
        if next_calculation == "no":
        break

        else:
        print("Invalid Input")
```

C: > Users > 27733 > Desktop > calculatoor.py > ...

```python
# This function adds two numbers
def add(x, y):
    return x + y
def subtract(x, y):      # This function subtracts two numbers
    return x - y
def multiply(x, y):      # This function multiplies two numbers
    return x * y
def divide(x, y):        # This function divides two numbers
    return x / y
print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")
while True:              # take input from the user
    choice = input("Enter choice(1/2/3/4): ")         # check if choice is one of the four options
    if choice in ('1', '2', '3', '4'):
        num1 = float(input("Enter first number: "))
        num2 = float(input("Enter second number: "))
        if choice == '1':
            print(num1, "+", num2, "=", add(num1, num2))
        elif choice == '2':
            print(num1, "-", num2, "=", subtract(num1, num2))
        elif choice == '3':
            print(num1, "*", num2, "=", multiply(num1, num2))
        elif choice == '4':
            print(num1, "/", num2, "=", divide(num1, num2))        # check if user wants another calculation
        next_calculation = input("Let's do next calculation? (yes/no): ")
        if next_calculation == "no":
          break
    else:
        print("Invalid Input")
```

Output:

```
Select operation.
1.Add
2.Subtract
3.Multiply
4.Divide
Enter choice(1/2/3/4): 3
Enter first number: 15
Enter second number: 14
15.0 * 14.0 = 210.0
Let's do next calculation? (yes/no): no
```

Question-2:
Python program to check prime number using SPYDER

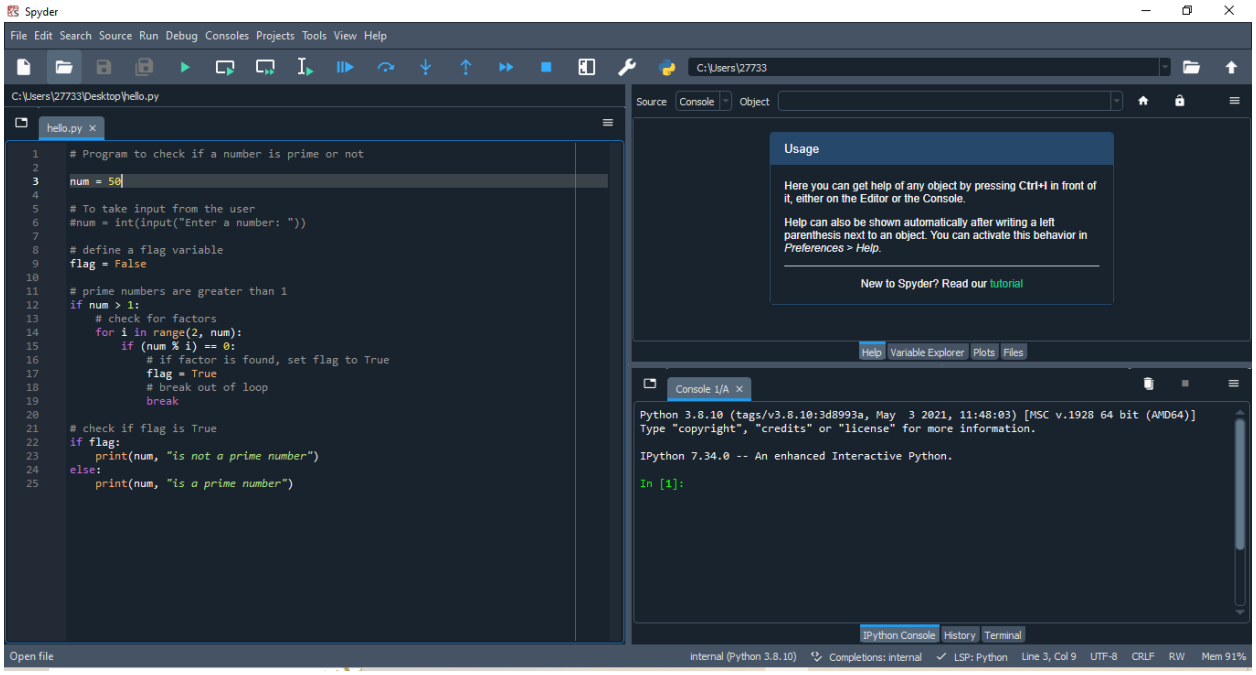
Solution:

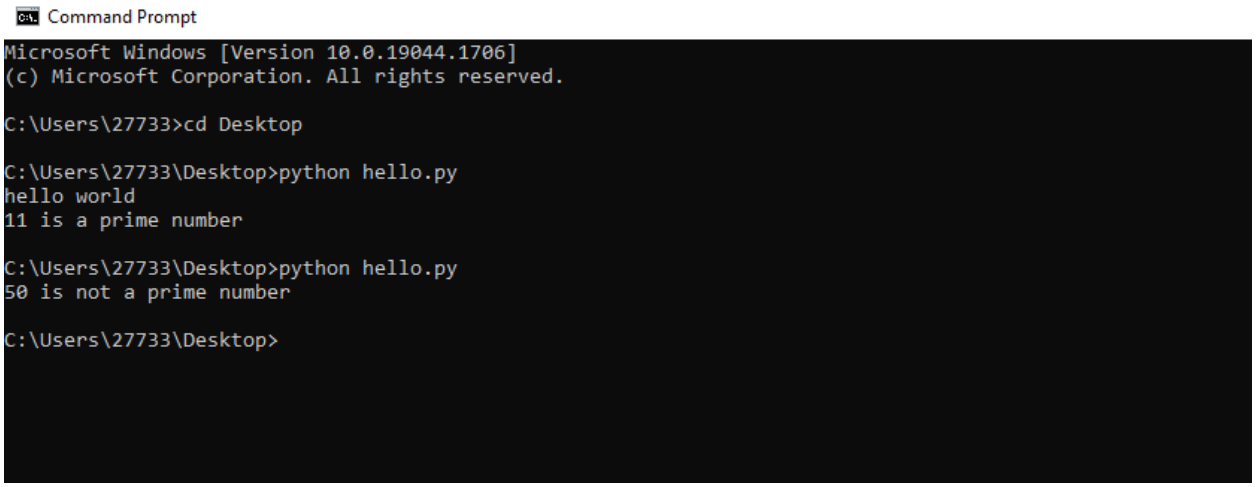
```
# Program to check if a number is prime or not
num = 50
# To take input from the user
#num = int(input("Enter a number: "))

# define a flag variable
flag = False

# prime numbers are greater than 1
if num > 1:
        # check for factors
        for i in range(2, num):
        if (num % i) == 0:
        # if factor is found, set flag to True
        flag = True
        # break out of loop
        break

# check if flag is True
if flag:
        print(num, "is not a prime number")
else:
        print(num, "is a prime number")
```





Question-3:

Create a webpage using python

Solution:

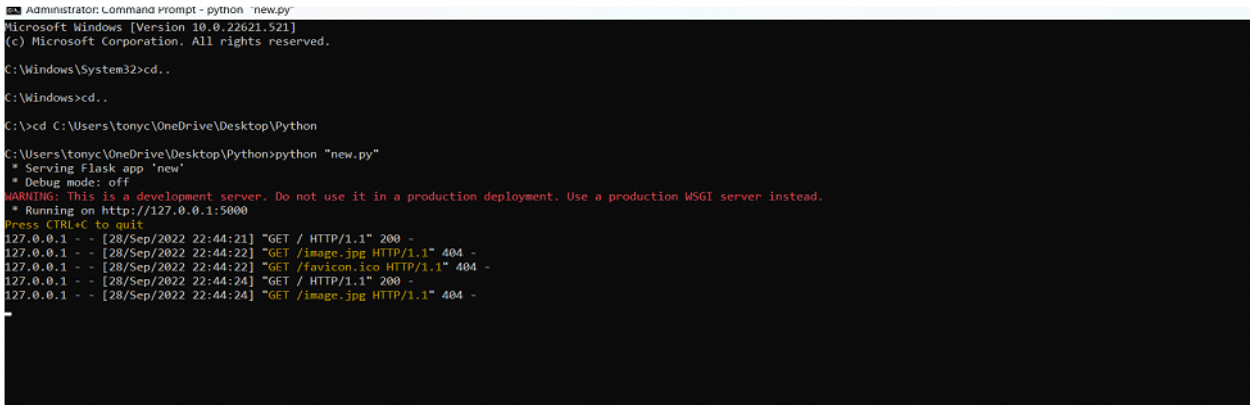
Python Code:

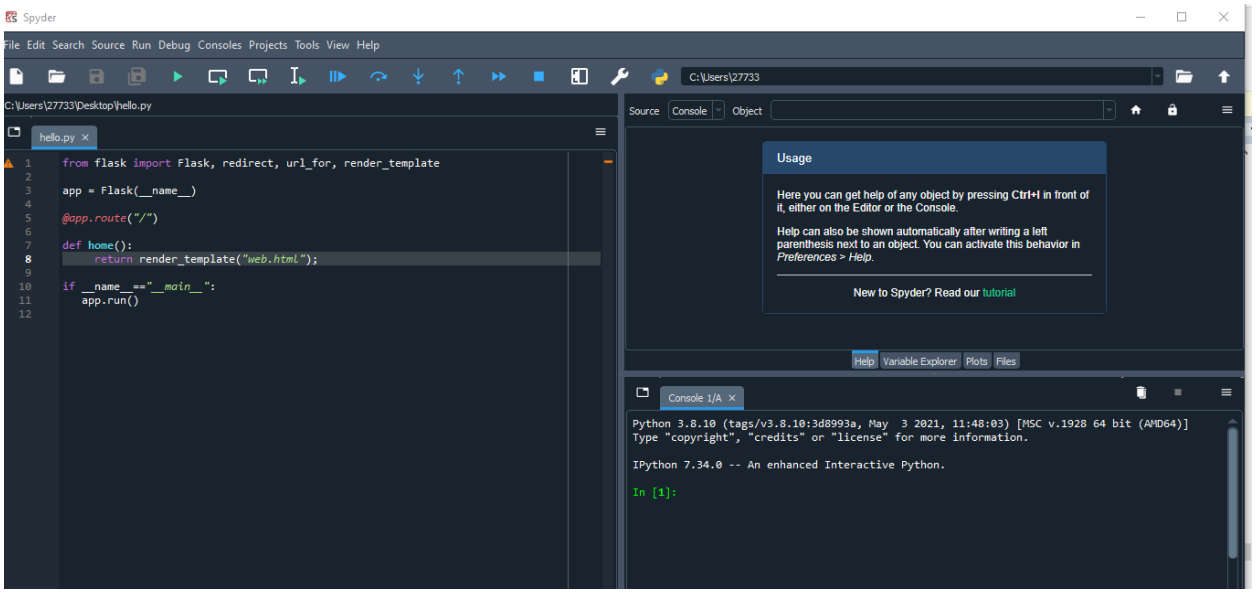
```
from flask import Flask, redirect, url_for, render_template
```

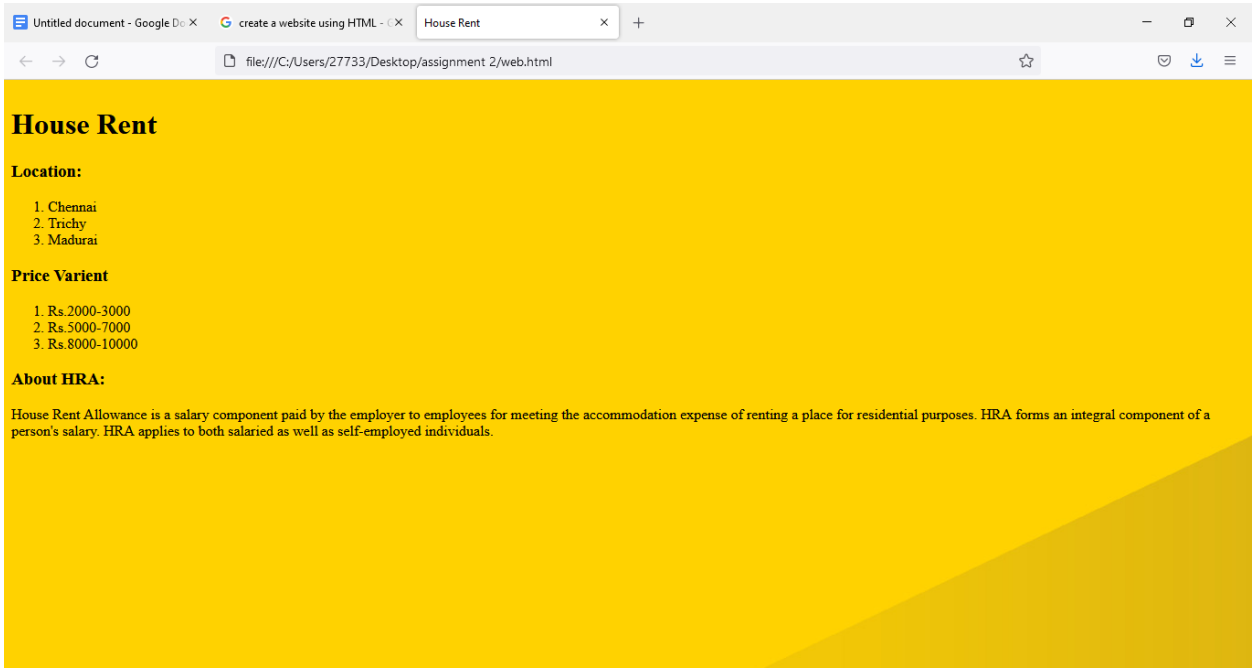
app = Flask(__name__)
@app.route("/")
def home():
return render_template("index.html")
if __name__=="__main__":
app.run()

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>House Rent</title>

</head>
<body  style="background-image: url('house2.jpg');display:inline-block;">
    <h1>House Rent</h1>
    <h3>Location:</h3>
    <ol>
        <li>Chennai</li>
        <li>Trichy</li>
        <li>Madurai</li>
    </ol>
    <h3>Price Varient</h3>
    <ol>
        <li>Rs.2000-3000</li>
        <li>Rs.5000-7000</li>
        <li>Rs.8000-10000</li>
    </ol>
    <h3>About HRA:</h3>
    <p> House Rent Allowance is a salary component paid by the employer to
employees for meeting the accommodation expense of renting a place for
residential purposes. HRA forms an integral component of a person's
salary. HRA applies to both salaried as well as self-employed individuals.
    </p>
</body>
</html>
```


Administrator: Command Prompt - python "new.py"
Microsoft Windows [Version 10.0.22621.521]
(c) Microsoft Corporation. All rights reserved.
C:\Windows\System32>cd..
C:\Windows>cd..
C:\>cd C:\Users\tonyc\OneDrive\Desktop\Python
C:\Users\tonyc\OneDrive\Desktop\Python>python "new.py"
* Serving Flask app 'new'
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
127.0.0.1 - - [28/Sep/2022 22:44:21] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [28/Sep/2022 22:44:22] "GET /image.jpg HTTP/1.1" 404 -
127.0.0.1 - - [28/Sep/2022 22:44:22] "GET /favicon.ico HTTP/1.1" 404 -
127.0.0.1 - - [28/Sep/2022 22:44:24] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [28/Sep/2022 22:44:24] "GET /image.jpg HTTP/1.1" 404 -


Spyder
File Edit Search Source Run Debug Consoles Projects Tools View Help
C:\Users\27733\Desktop\hello.py
hello.py
from flask import Flask, redirect, url_for, render_template
app = Flask(__name__)
@app.route("/")
def home():
return render_template("web.html");
if __name__=="__main__":
app.run()
Usage
Here you can get help of any object by pressing Ctrl+I in front of it, either on the Editor or the Console.
Help can also be shown automatically after writing a left parenthesis next to an object. You can activate this behavior in Preferences > Help.
New to Spyder? Read our tutorial
Help
Variable Explorer
Plots
Files
Console 1/A
Python 3.8.10 (tags/v3.8.10:3d8993a, May 3 2021, 11:48:03) [MSC v.1928 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.
IPython 7.34.0 -- An enhanced Interactive Python.
In [1]:


Untitled document - Google Do
create a website using HTML -
House Rent
file:///C:/Users/27733/Desktop/assignment 2/web.html
House Rent
Location:
1. Chennai
2. Trichy
3. Madurai
Price Varient
1. Rs.2000-3000
2. Rs.5000-7000
3. Rs.8000-10000
About HRA:
House Rent Allowance is a salary component paid by the employer to employees for meeting the accommodation expense of renting a place for residential purposes. HRA forms an integral component of a person's salary. HRA applies to both salaried as well as self-employed individuals.