assignment-1-1

August 13, 2024

[1]:
```
!pip install pyppeteer
```

```
Collecting pyppeteer
  Downloading pyppeteer-2.0.0-py3-none-any.whl.metadata (7.1 kB)
Collecting appdirs<2.0.0,>=1.4.3 (from pyppeteer)
  Downloading appdirs-1.4.4-py2.py3-none-any.whl.metadata (9.0 kB)
Requirement already satisfied: certifi>=2023 in /usr/local/lib/python3.10/dist-
packages (from pyppeteer) (2024.7.4)
Requirement already satisfied: importlib-metadata>=1.4 in
/usr/local/lib/python3.10/dist-packages (from pyppeteer) (8.2.0)
Collecting pyee<12.0.0,>=11.0.0 (from pyppeteer)
  Downloading pyee-11.1.0-py3-none-any.whl.metadata (2.8 kB)
Requirement already satisfied: tqdm<5.0.0,>=4.42.1 in
/usr/local/lib/python3.10/dist-packages (from pyppeteer) (4.66.5)
Collecting urllib3<2.0.0,>=1.25.8 (from pyppeteer)
  Downloading urllib3-1.26.19-py2.py3-none-any.whl.metadata (49 kB)
                           49.3/49.3 kB
739.5 kB/s eta 0:00:00
Collecting websockets<11.0,>=10.0 (from pyppeteer)
  Downloading websockets-10.4-cp310-cp310-manylinux_2_5_x86_64.manylinux1_x86_64
.manylinux_2_17_x86_64.manylinux2014_x86_64.whl.metadata (6.4 kB)
Requirement already satisfied: zipp>=0.5 in /usr/local/lib/python3.10/dist-
packages (from importlib-metadata>=1.4->pyppeteer) (3.19.2)
Requirement already satisfied: typing-extensions in
/usr/local/lib/python3.10/dist-packages (from pyee<12.0.0,>=11.0.0->pyppeteer)
(4.12.2)
Downloading pyppeteer-2.0.0-py3-none-any.whl (82 kB)
                         82.9/82.9 kB
1.4 MB/s eta 0:00:00
Downloading appdirs-1.4.4-py2.py3-none-any.whl (9.6 kB)
Downloading pyee-11.1.0-py3-none-any.whl (15 kB)
Downloading urllib3-1.26.19-py2.py3-none-any.whl (143 kB)
                         143.9/143.9 kB
5.4 MB/s eta 0:00:00
Downloading websockets-10.4-cp310-cp310-manylinux_2_5_x86_64.manylinux1_x8
6_64.manylinux_2_17_x86_64.manylinux2014_x86_64.whl (106 kB)
                         106.8/106.8 kB
7.7 MB/s eta 0:00:00
```

```
Installing collected packages: appdirs, websockets, urllib3, pyee,
pyppeteer
  Attempting uninstall: urllib3
    Found existing installation: urllib3 2.0.7
    Uninstalling urllib3-2.0.7:
      Successfully uninstalled urllib3-2.0.7
Successfully installed appdirs-1.4.4 pyee-11.1.0 pyppeteer-2.0.0 urllib3-1.26.19
websockets-10.4
```

[2]:
```python
import asyncio
from pyppeteer import launch
```

[3]:
```python
async def export_pdf(url, output):
  browser = await launch()
  page = await browser.newPage()
  await page.goto(url, waitUntil='networkidle0')
  pdf = await page.pdf(output)
  await browser.close()
  return pdf
```

[4]:
```python
# Write a python program to implement a simple calculator using user input and␣
 ↪conditional logic.

# Function to add two numbers.
def add(num1, num2):
  return num1 + num2

# Function to subtract two numbers.
def subtract(num1, num2):
  return num1 - num2

# Function to multiply two numbers.
def multiply(num1, num2):
    return num1 * num2

# Function to divide two numbers
def divide(num1, num2):
    return num1 / num2

print("Please select operation -\n" \
        "1. Add\n" \
        "2. Subtract\n" \
        "3. Multiply\n" \
        "4. Divide\n")


# Take input from the user
```

```
select = int(input("Select operations form 1, 2, 3, 4 :"))

number_1 = int(input("Enter first number: "))
number_2 = int(input("Enter second number: "))
if select == 1:
    print(number_1, "+", number_2, "=",
                    add(number_1, number_2))

elif select == 2:
    print(number_1, "-", number_2, "=",
                    subtract(number_1, number_2))

elif select == 3:
    print(number_1, "*", number_2, "=",
                    multiply(number_1, number_2))

elif select == 4:
    print(number_1, "/", number_2, "=",
                    divide(number_1, number_2))
else:
    print("Invalid input")
```

```
Please select operation -
1. Add
2. Subtract
3. Multiply
4. Divide

Select operations form 1, 2, 3, 4 :1
Enter first number: 2
Enter second number: 3
2 + 3 = 5
```

[5]:
```
# Write a python program to generate a multiplication table for a given number.
ourNum = int(input("Enter the number you want to generate a multiplication␣
 ↪table for, then hit the `enter` key: "))
ourRange = range(1,11)
for x in ourRange:
    result = ourNum * x
    print(ourNum," * ",x," = ",result)
```

```
Enter the number you want to generate a multiplication table for, then hit the
`enter` key: 16
16  *  1  =  16
16  *  2  =  32
16  *  3  =  48
16  *  4  =  64
```

```
16  *  5  =  80
16  *  6  =  96
16  *  7  =  112
16  *  8  =  128
16  *  9  =  144
16  *  10  =  160
```

[6]:
```
# Create python functions to calculate the area and perimeter of different␣
 ↪shapes(circle,rectangle,triangle).
print("Enter number to select shape:")
print("1.Triangle")
print("2.Rectangle")
print("3.Circle")
n = int(input("Enter your choice 1,2,3,4 :"))
if (n==1):
    S1 = int(input("Enter the length of Side 1 :"))
    S2 = int(input("Enter the length of Base :" ))
    S3 = int(input("Enter the length of Side 3 :"))
    h = int(input("Enter the height of the triangle : "))
    print ("Perimeter of trinagle is ",(S1+S2+S3))
    print ("Area of triangle is ",(1/2*S2*h))
elif (n==2):
    l = int(input("Enter the length of the rectangle : "))
    b = int(input("Enter the base of the rectangle : "))
    print("Perimeter of the rectangle is : ",(2*(l+b)))
    print("Area of the rectangle is : ",(l*b))
elif(n==3):
    r = int(input("Enter the radius of the circle : "))
    print("Circumference of the circle is ",(2*3.14*r))
    print("Area of the circle is ",(3.14*r*r))
else:
    print("Invalid Option")
```

```
Enter number to select shape:
1.Triangle
2.Rectangle
3.Circle
Enter your choice 1,2,3,4 :3
Enter the radius of the circle : 3
Circumference of the circle is  18.84
Area of the circle is  28.259999999999998
```

[7]:
```
# Write a python program to create a list of names and sort it alphabetically.
my_str = "Hello mam , My name is Jyoti Indore"

# To take input from the user
#my_str = input("Enter a string: ")
```

```
# breakdown the string into a list of words
words = [word.lower() for word in my_str.split()]

# sort the list
words.sort()

# display the sorted words

print("The sorted words are:")
for word in words:
   print(word)
```

```
The sorted words are:
,
hello
indore
is
jyoti
mam
my
name
```

[8]:
```
# Write a python program to find the maximum and minimum values in a list.
l=eval(input("Enter a list of numbers "))
# [4,7,9,10,45,21,46,67,23] --- input
print("min=",min(l))
print("max=",max(l))
```

```
Enter a list of numbers 2,5,6,8,9
min= 2
max= 9
```

[9]:
```
# Write a python program to convert a list into a tuple and vice versa.
# Create a list containing a sequence of numbers
listx = [5, 10, 7, 4, 15, 3]
# Print the contents of the 'listx' list
print(listx)

# Use the 'tuple()' function, a built-in Python function, to convert the␣
 ↪'listx' list to a tuple
tuplex = tuple(listx)
# Print the contents of the 'tuplex' tuple
print(tuplex)
```

```
[5, 10, 7, 4, 15, 3]
(5, 10, 7, 4, 15, 3)
```