

GPS Location Service Help Desk
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Project Report

Our project consists of a GPS location service that is coded with the location at Old Dominion University. The user would input the location of their choice, which would be HarrisTeeter, Walmart, Target, Sentara, Lynnhaven Mall, and the output would consist of a route and a mileage distance to the location of choice. The output message would give the user a detailed route to their destination of choice. Below are the outputs that we have used as output statements.

The Python program was utilized with the version; 3.11.1

HarrisTeeter= "We have detected your location at Old Dominion University. Harris Teeter is 2.3 miles away and 8 minutes by car. Your route is as follows: Proceed to Hampton Blvd south for 1.7 miles. Turn left on W Princess Anne Rd for .5 of a mile. Then turn left on De Bree Avenue. You have reached your destination. Would you like another location?"

Walmart = "We have detected your location at Old Dominion University. Walmart Supercenter is 10.6 miles away. Your route is as follows: Proceed north on Hampton Blvd for 2.5 miles. Turn right on Terminal Blvd then proceed for 1.5 mile until you reach Hwy 64. Proceed for 5 miles until Hwy 13, then proceed for 1.5 miles until you reach Lowery Rd. You have reached your destination. Would you like another location?"

Target = "We have detected your location at Old Dominion University. Target is 10.4 miles away. Your route is as follows: Proceed north on Hampton Blvd for 2.5 miles. Turn right on Terminal Blvd then proceed for 1.5 mile until you reach Hwy 64. Proceed for 5 miles until Hwy 13, then proceed for 1.3 of a mile. You have reached your destination. Would you like another location?"

Sentara = "We have detected your location at Old Dominion University. Sentara Norfolk General Hospital is 2.1 miles away. Your route is as follows: Proceed south on Hampton Blvd for 2.1 miles. You have reached your destination. Would you like another location?"

LynnhavenMall = "We have detected your location at Old Dominion University. Lynnhaven Mall is 18.2 miles away and 27 minutes by car. Your route is as follows: Proceed north on Hampton Blvd for 2.2 miles until you reach left on Brambleton Ave. Proceed for 1.6 mile until you reach St Pauls Blvd, then turn right. Proceed left on Hwy 264 for 12 miles until you reach Lynnhaven Pkwy. Turn right and proceed for 1.2 miles. You have reached your destination. Would you like another location?"

If a user wanted to have another location after inputting a single location, they would type Yes. The output message would be:

Yes = "Okay! What is the location of your choice? Please choose from the following:
HarrisTeeter, Walmart, Target, Sentara, Lynnhaven Mall"

If not, a user would type No. The output message would be:
No = "Okay! Have a good day! --- Server has disconnected ---"

The code would consist of input and output statements that are coded with specific answers that coincide with the location of interest. The program is made in Python.

Below are the codes that we have implemented into the Python system.

```

1 import socket
2 sock = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
3 host_name = socket.gethostname()
4 ip = socket.gethostbyname(host_name)
5 port = 5000
6
7 input=print("Welcome to the GPS Location service. Please input your loca
8
9 HarrisTeeter= "We have detected your location at Old Dominion University
10 location = "HarrisTeeter"
11 if location == HarrisTeeter:
12     for i in range(5, location):
13         print(location)
14 |
15
16 Walmart = "We have detected your location at Old Dominion University. Wa
17 location2 = "Walmart"
18 if location2 == Walmart:
19     for i in range(location2):
20         if (number % i) == 0:
21             print(location2)
22
23 Target = "We have detected your location at Old Dominion University. Tar
24 location3 = "Target"
25 if location3 == Target:
26     for i in range(location3):
27         if (number % i) == 0:
28             print(location3)
29
30 Sentara = "We have detected your location at Old Dominion University. Se
31 location4 = "Sentara"
32 if location4 == Sentara:
33     for i in range(location4):
34         if (number % i) == 0:
35             print(location4)
36
37 LynnhavenMall = "We have detected your location at Old Dominion Universi
38 location5 = "LynnhavenMall"
39 if location == LynnhavenMall:
40     for i in range(location5):
41         if (number % i) == 0:
42             print(location5)
43
44
45 Yes = "Okay! What is the location of your choice? Please choose from the
46 yes = "Yes"
47 if yes == Yes:
48     for i in range(yes):
49         print(Yes)
50
51
52 No = "Okay! Have a good day! --- Server has disconnected ---"
53 no = "No"
54 if no == No:
55     for i in range(no):
56         print(No)
57

```

Below is what the program looks like when run and used. The entire statements are unable to be fully shown in the screenshot, but they are correct and utilize the correct output.

```
Python 3.11.1 (tags/v3.11.1:a7a450f, Dec 6 2022, 19:58:39) [MSC v.1934 64 bit (AMD64)]
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\hosse\AppData\Local\Programs\Python\Python311\Programming Project
Welcome to the GPS Location service. Please input your location of interest from the f
>>> Walmart
'We have detected your location at Old Dominion University. Walmart Supercenter is 10.
ou reach Hwy 64. Proceed for 5 miles until Hwy 13, then proceed for 1.5 miles until yo
>>> Yes
'Okay! What is the location of your choice? Please choose from the following: HarrisTe
>>> Target
'We have detected your location at Old Dominion University. Target is 10.4 miles away.
64. Proceed for 5 miles until Hwy 13, then proceed for 1.3 of a mile. You have reached
>>> No
'Okay! Have a good day! --- Server has disconnected ---'
>>> |
```