(1) WhatsApp | DAY-7 (1).pdf | FREE AI Code Genera | Online Python Comp | Notifications | Yogi9600/DAA

programiz.com/python-programming/online-compiler/

Programiz Python Online Compiler

Programiz PRO >

main.py

Share | Run

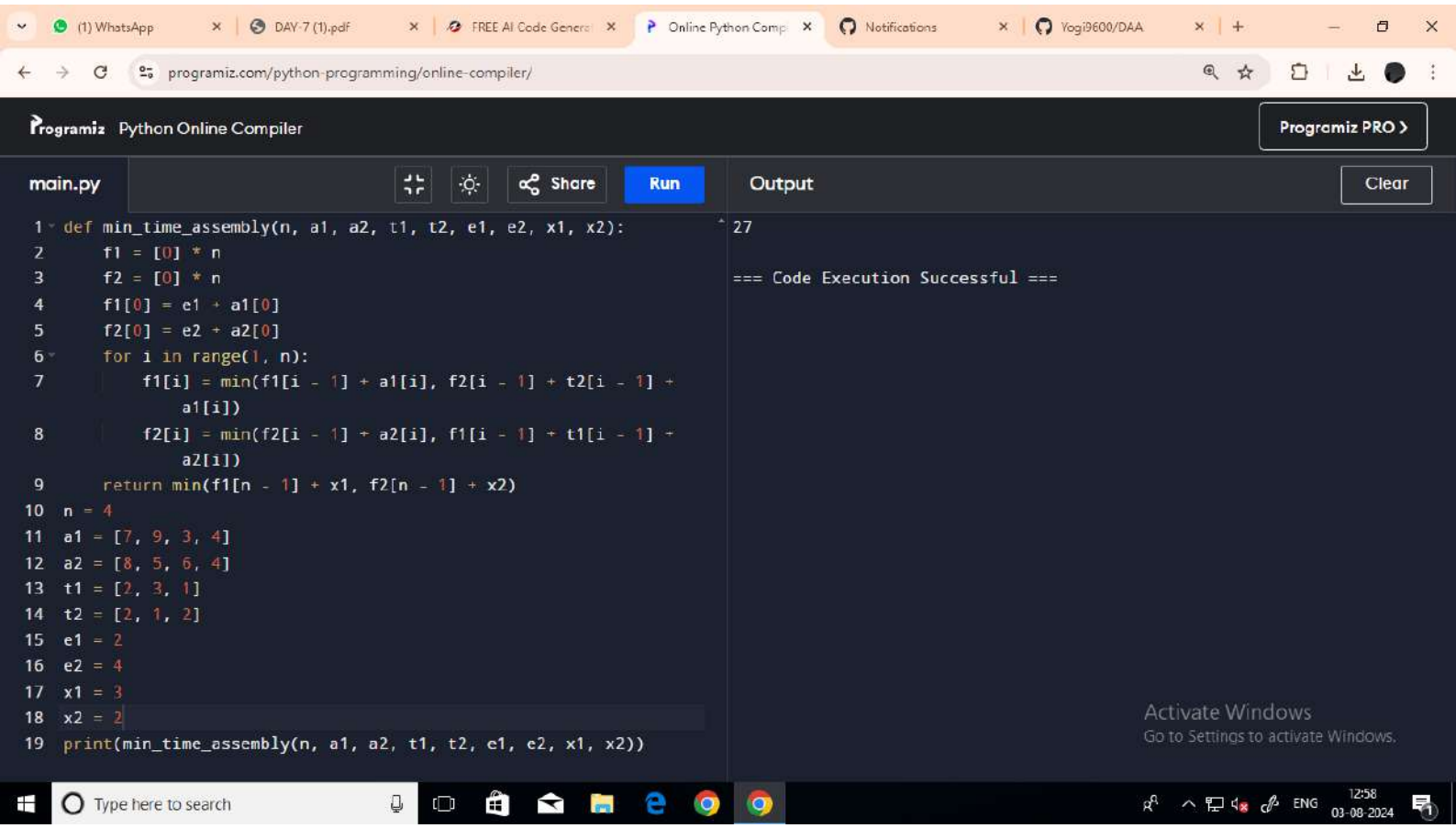
```
def count_dice_throws(num_dice, num_sides, target):
    dp = [[0] * (target + 1) for _ in range(num_dice + 1)]
    dp[0][0] = 1
    for i in range(1, num_dice + 1):
        for j in range(1, num_sides + 1):
            for k in range(j, target + 1):
                dp[i][k] += dp[i - 1][k - j]
    return dp[num_dice][target]

print(count_dice_throws(2, 6, 7))
print(count_dice_throws(3, 4, 10))

```

Output | Clear

```
6
6

=== Code Execution Successful ===
```


Type here to search

ENG 12:50 03-08-2024


(1) WhatsApp
DAY-7 (1).pdf
FREE AI Code Genera
Online Python Comp
Notifications
Yogi9600/DAA
programiz.com/python-programming/online-compiler/
Programiz Python Online Compiler
Programiz PRO
main.py
Share
Run
Output
Clear
def min_time_assembly(n, a1, a2, t1, t2, e1, e2, x1, x2):
f1 = [0] * n
f2 = [0] * n
f1[0] = e1 + a1[0]
f2[0] = e2 + a2[0]
for i in range(1, n):
f1[i] = min(f1[i - 1] + a1[i], f2[i - 1] + t2[i - 1] + a1[i])
f2[i] = min(f2[i - 1] + a2[i], f1[i - 1] + t1[i - 1] + a2[i])
return min(f1[n - 1] + x1, f2[n - 1] + x2)
n = 4
a1 = [7, 9, 3, 4]
a2 = [8, 5, 6, 4]
t1 = [2, 3, 1]
t2 = [2, 1, 2]
e1 = 2
e2 = 4
x1 = 3
x2 = 2
print(min_time_assembly(n, a1, a2, t1, t2, e1, e2, x1, x2))
27
=== Code Execution Successful ===
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
12:58
03-08-2024

(2) WhatsApp | DAY-7 (1).pdf | FREE AI Code Genera | Online Python Comp | Notifications | Yogi9600/DAA

programiz.com/python-programming/online-compiler/

Programiz Python Online Compiler

Programiz PRO >

main.py

Share | Run

```python
import numpy as np
def min_production_time(stations, transfer_times, dependencies):
    n = len(stations[0])
    dp = np.zeros((3, n))
    dp[:, 0] = stations[:, 0]
    for i in range(1, n):
        for j in range(3):
            dp[j, i] = stations[j, i] + min(dp[k, i - 1] +
                transfer_times[k][j] for k in range(3))
    for d in dependencies:
        for j in range(3):
            dp[j, d[1]] = max(dp[j, d[1]], dp[d[0], d[1] - 1])
    return min(dp[:, -1])
stations = np.array([[5, 9, 3], [6, 8, 4], [7, 6, 5]])
transfer_times = [[0, 2, 3], [2, 0, 4], [3, 4, 0]]
dependencies = [(0, 1), (1, 2)]
min_time = min_production_time(stations, transfer_times,
    dependencies)
print(f"Minimum Production Time: {min_time}")

```

Output | Clear

```
Minimum Production Time: 17.0

=== Code Execution Successful ===
```


Type here to search

ENG 13:01 03-08-2024

(1) WhatsApp | DAY-7 (1).pdf | FREE AI Code Genera | Online Python Comp | Notifications | Yogi9600/DAA

programiz.com/python-programming/online-compiler/

Programiz Python Online Compiler

Programiz PRO >

main.py

Share | Run

```
1  import itertools
2  def find_min_path_distance(matrix):
3      min_distance = float('inf')
4      for path in itertools.permutations(range(len(matrix))):
5          distance = sum(matrix[i][path[i]] for i in range(len
               (matrix)))
6          min_distance = min(min_distance, distance)
7      return min_distance
8  matrix = [
9      [0, 10, 15, 20],
10     [10, 0, 35, 25],
11     [15, 35, 0, 30],
12     [20, 25, 30, 0]
13 ]
14 output = find_min_path_distance(matrix)
15 print("Output:", output)
16
```

Output

Clear

```
Output: 0

=== Code Execution Successful ===
```


Type here to search

ENG 13:08 03-08-2024

(1) WhatsApp | DAY-7 (1).pdf | FREE AI Code Genera | Online Python Comp | Notifications | Yogi9600/DAA

programiz.com/python-programming/online-compiler/

Programiz Python Online Compiler

Programiz PRO >

main.py

Share | Run

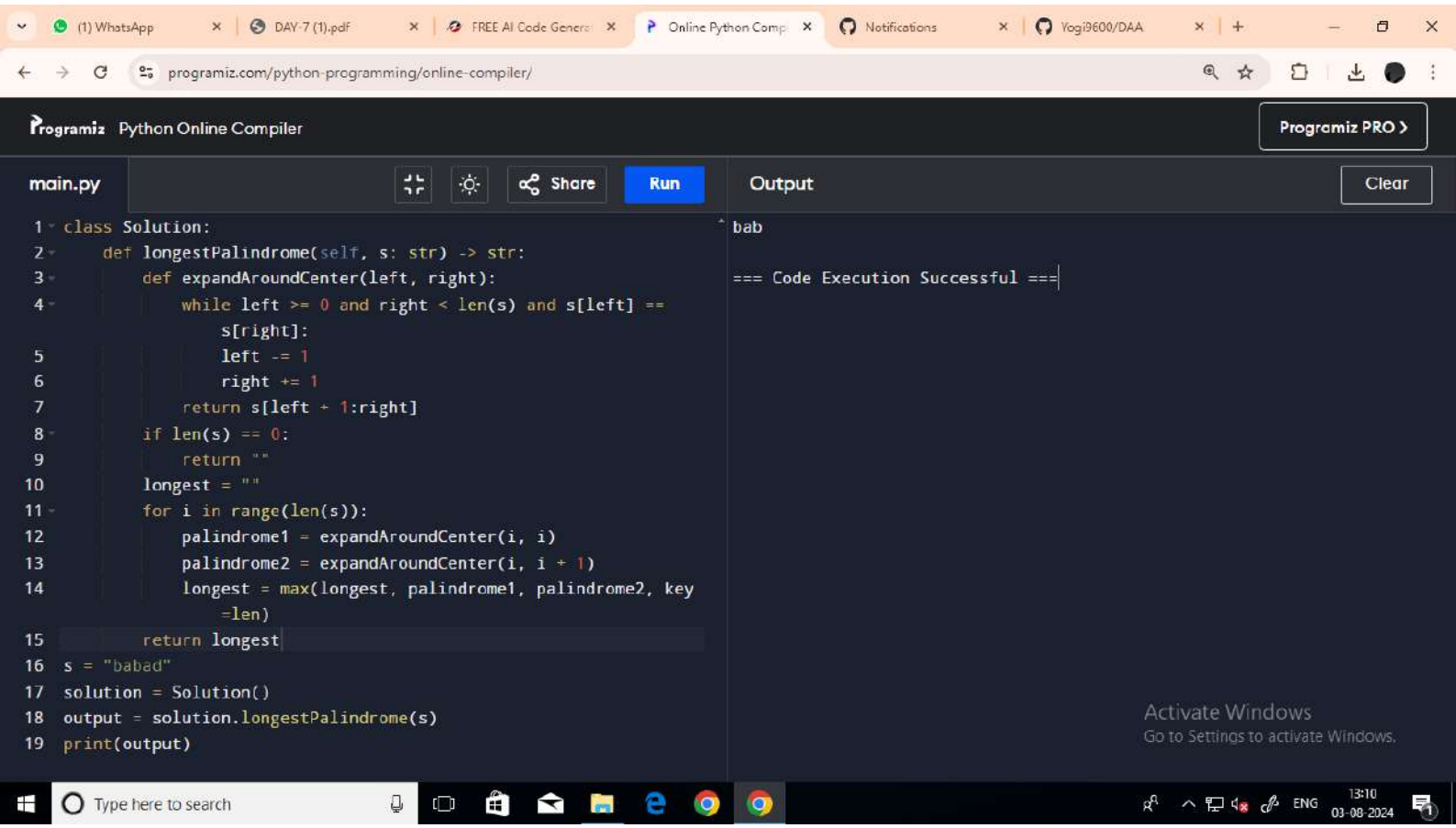
```
from itertools import permutations
distances = {
    ('A', 'B'): 10, ('A', 'C'): 15, ('A', 'D'): 20, ('A', 'E'):
        25,
    ('B', 'C'): 35, ('B', 'D'): 25, ('B', 'E'): 30,
    ('C', 'D'): 30, ('C', 'E'): 20,
    ('D', 'E'): 15
}
cities = ['A', 'B', 'C', 'D', 'E']
min_distance = float('inf')
best_route = None
for route in permutations(cities):
    route_distance = sum(distances.get((route[i], route[i + 1]),
        float('inf')) for i in range(len(route) - 1))
    if route_distance < min_distance:
        min_distance = route_distance
        best_route = route
print(f"The shortest route is {' -> '.join(best_route)} ->
    {best_route[0]} with a total distance of {min_distance}.")

```

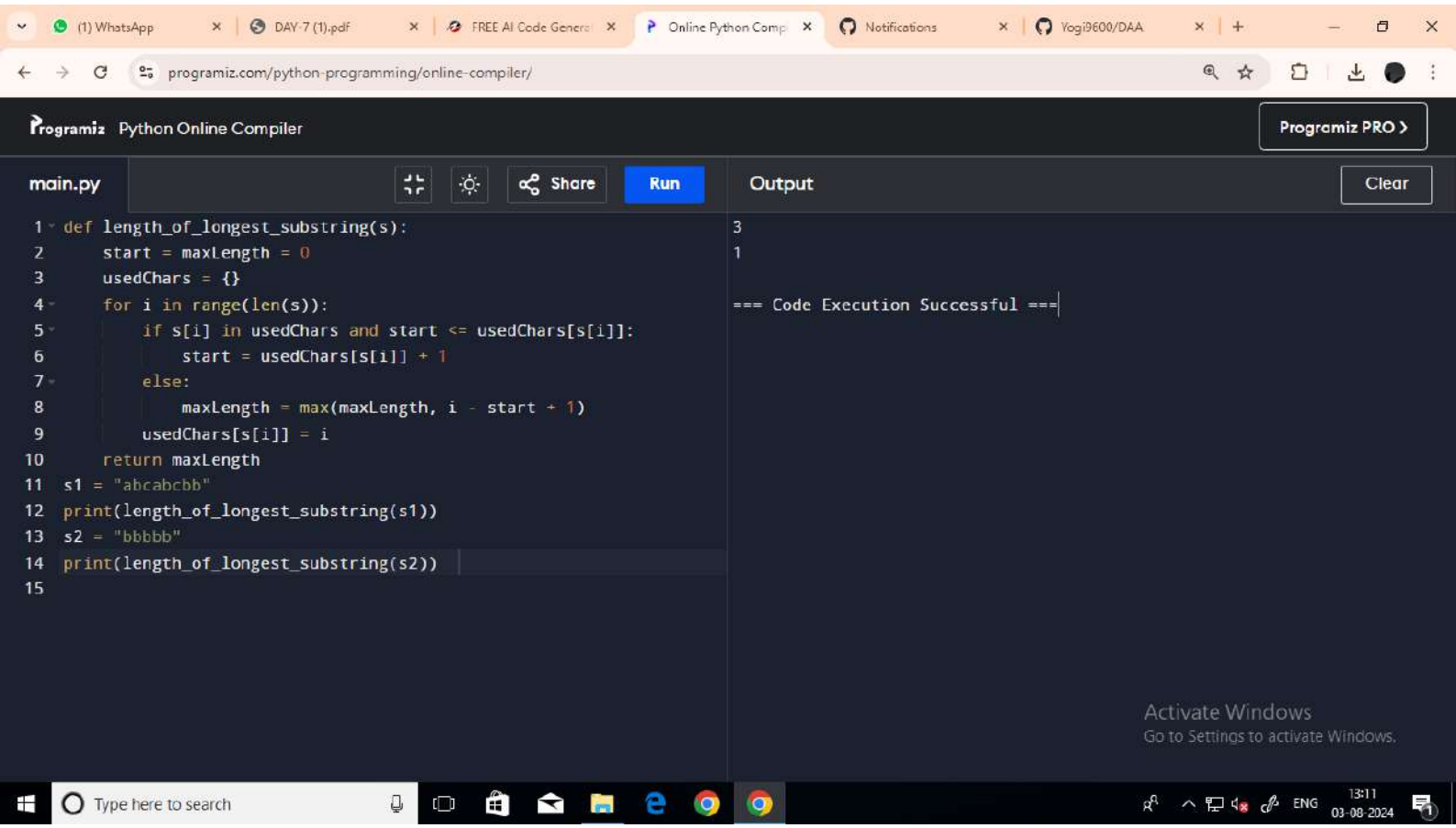
Output | Clear

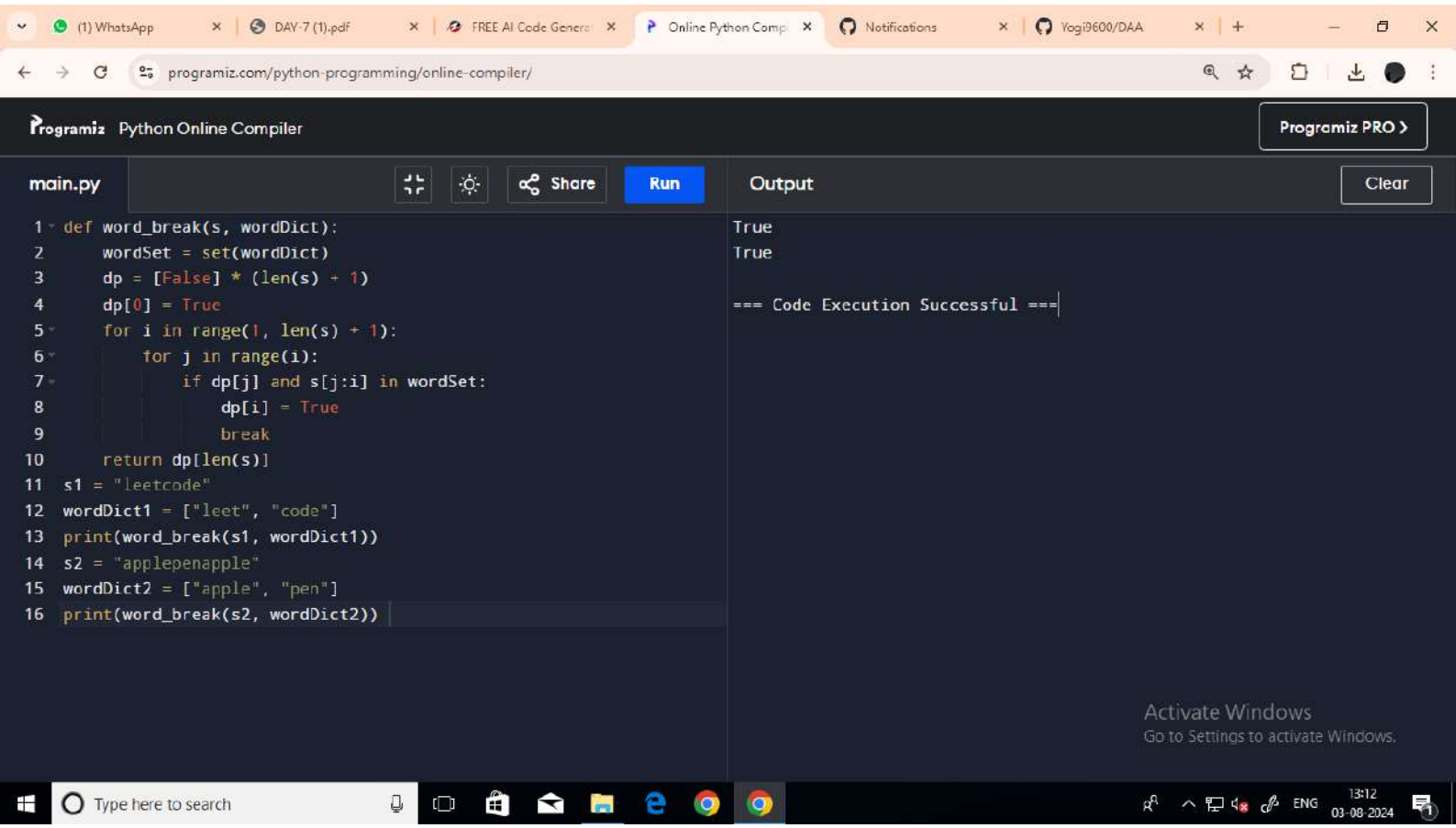
```
The shortest route is A -> B -> C -> D -> E -> A with a total distance
    of 90.

=== Code Execution Successful ===
```

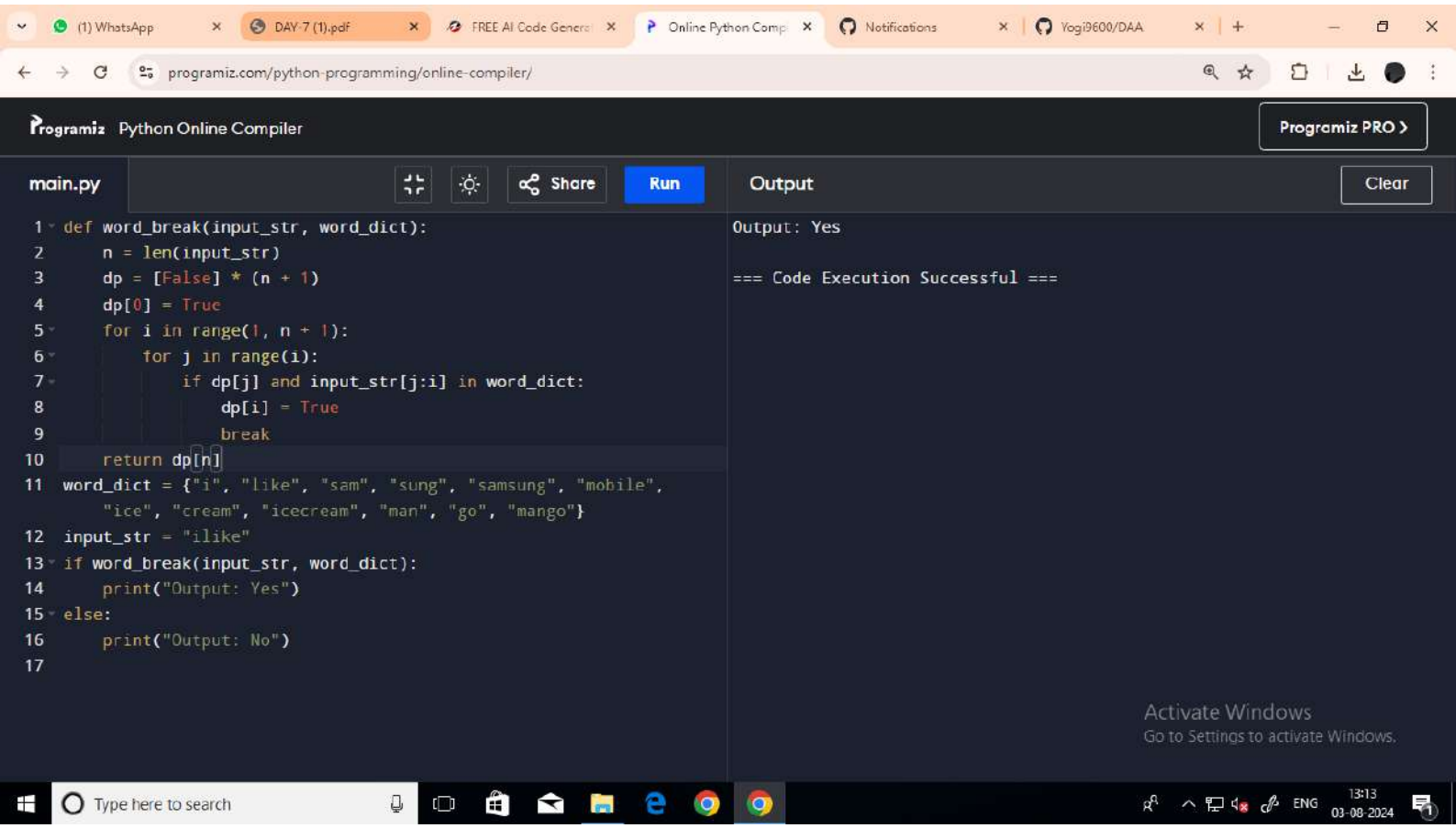

Type here to search

ENG 13:09 03-08-2024


(1) WhatsApp
DAY-7 (1).pdf
FREE AI Code Genera
Online Python Comp
Notifications
Yogi9600/DAA
programiz.com/python-programming/online-compiler/
Programiz Python Online Compiler
Programiz PRO
main.py
Share
Run
Output
Clear
class Solution:
def longestPalindrome(self, s: str) -> str:
def expandAroundCenter(left, right):
while left >= 0 and right < len(s) and s[left] == s[right]:
left -= 1
right += 1
return s[left + 1:right]
if len(s) == 0:
return ""
longest = ""
for i in range(len(s)):
palindrome1 = expandAroundCenter(i, i)
palindrome2 = expandAroundCenter(i, i + 1)
longest = max(longest, palindrome1, palindrome2, key=len)
return longest
s = "babad"
solution = Solution()
output = solution.longestPalindrome(s)
print(output)
bab
=== Code Execution Successful ===
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
13:10
03-08-2024


(1) WhatsApp
DAY-7 (1).pdf
FREE AI Code Genera
Online Python Comp
Notifications
Yogi9600/DAA
programiz.com/python-programming/online-compiler/
Programiz Python Online Compiler
Programiz PRO
main.py
Share
Run
Output
Clear
def length_of_longest_substring(s):
start = maxLength = 0
usedChars = {}
for i in range(len(s)):
if s[i] in usedChars and start <= usedChars[s[i]]:
start = usedChars[s[i]] + 1
else:
maxLength = max(maxLength, i - start + 1)
usedChars[s[i]] = i
return maxLength
s1 = "abcabcbb"
print(length_of_longest_substring(s1))
s2 = "bbbbb"
print(length_of_longest_substring(s2))
3
1
=== Code Execution Successful ===
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
13:11
03-08-2024


(1) WhatsApp
DAY-7 (1).pdf
FREE AI Code Genera
Online Python Comp
Notifications
Yogi9600/DAA
programiz.com/python-programming/online-compiler/
Programiz Python Online Compiler
Programiz PRO
main.py
Share
Run
Output
Clear
def word_break(s, wordDict):
wordSet = set(wordDict)
dp = [False] * (len(s) + 1)
dp[0] = True
for i in range(1, len(s) + 1):
for j in range(i):
if dp[j] and s[j:i] in wordSet:
dp[i] = True
break
return dp[len(s)]
s1 = "leetcode"
wordDict1 = ["leet", "code"]
print(word_break(s1, wordDict1))
s2 = "applepenapple"
wordDict2 = ["apple", "pen"]
print(word_break(s2, wordDict2))
True
True
=== Code Execution Successful ===
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
13:12
03-08-2024


(1) WhatsApp
DAY-7 (1).pdf
FREE AI Code Genera
Online Python Comp
Notifications
Yogi9600/DAA
programiz.com/python-programming/online-compiler/
Programiz Python Online Compiler
Programiz PRO
main.py
Share
Run
Output
Clear
def word_break(input_str, word_dict):
n = len(input_str)
dp = [False] * (n + 1)
dp[0] = True
for i in range(1, n + 1):
for j in range(i):
if dp[j] and input_str[j:i] in word_dict:
dp[i] = True
break
return dp[n]
word_dict = {"i", "like", "sam", "sung", "samsung", "mobile", "ice", "cream", "icecream", "man", "go", "mango"}
input_str = "ilike"
if word_break(input_str, word_dict):
print("Output: Yes")
else:
print("Output: No")
Output: Yes
=== Code Execution Successful ===
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
13:13
03-08-2024

(1) WhatsApp | DAY-7 (1).pdf | FREE AI Code Genera | Online Python Comp | Notifications | Yogi9600/DAA

programiz.com/python-programming/online-compiler/

Programiz Python Online Compiler

Programiz PRO >

main.py

Share | Run

```python
def full_justify(words, maxWidth):
    result = []
    line = []
    line_length = 0
    for word in words:
        if line_length + len(word) + len(line) > maxWidth:
            for i in range(maxWidth - line_length):
                line[i % (len(line) - 1 or 1)] += ' '
            result.append(''.join(line))
            line = []
            line_length = 0
        line.append(word)
        line_length += len(word)
    result.append(' '.join(line).ljust(maxWidth))
    return result
words = ["This", "is", "an", "example", "of", "text",
    "justification."]
maxWidth = 16
output = full_justify(words, maxWidth)
print(output)
```

Output | Clear

```
['This    is    an', 'example  of text', 'justification.  ']

=== Code Execution Successful ===
```


Type here to search

ENG 13:14 03-08-2024

(1) WhatsApp | DAY-7 (1).pdf | FREE AI Code Genera | Online Python Comp | Notifications | Yogi9600/DAA

programiz.com/python-programming/online-compiler/

Programiz Python Online Compiler

Programiz PRO >

main.py

Share | Run

```
class WordFilter:
    def __init__(self, words):
        self.words = words
    def f(self, pref, suff):
        max_index = -1
        for i in range(len(self.words)):
            if self.words[i].startswith(pref) and self.words[i]
                .endswith(suff):
                max_index = max(max_index, i)
        return max_index

wordFilter = WordFilter(["apple"])
output = wordFilter.f("a", "e")
print(output)

```

Output | Clear

```
0

=== Code Execution Successful ===
```


Type here to search

ENG 13:15 03-08-2024