

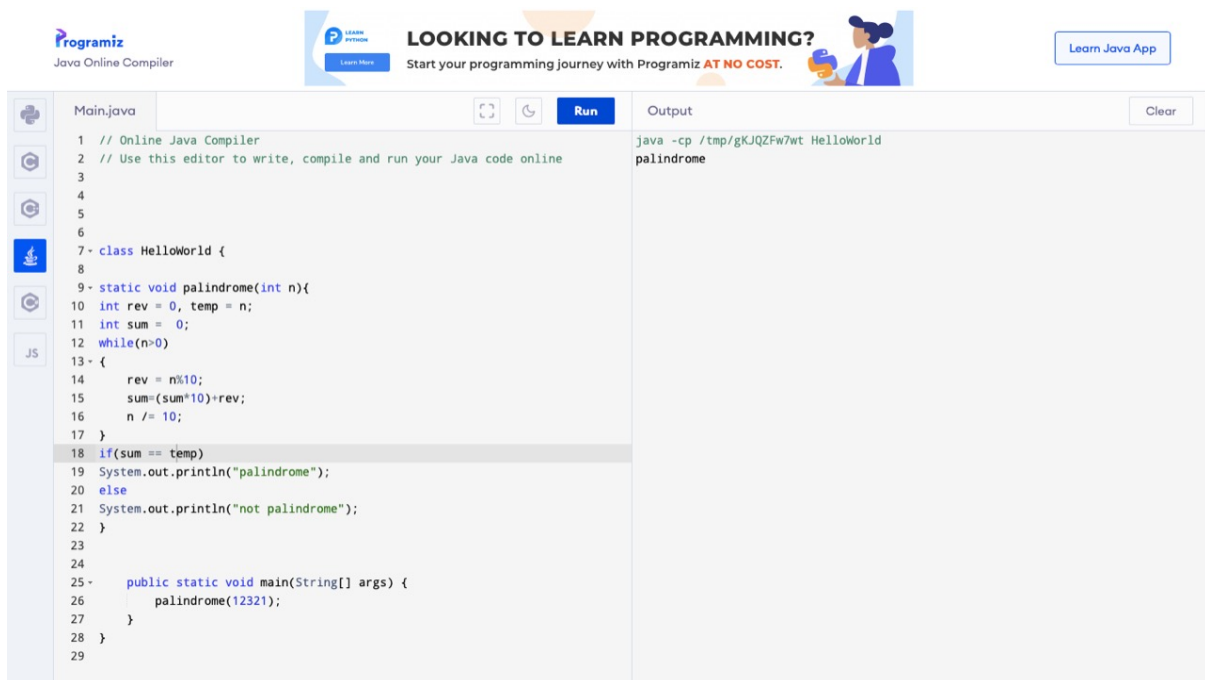
TEAM : NOOBS ULTIMATE

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QUES 1

Correct Code + Solution



The screenshot shows the Programiz Java Online Compiler interface. At the top, there is a banner for "LOOKING TO LEARN PROGRAMMING?" with a "Learn Here" button and a "Learn Java App" button. The main area is divided into two panels: "Main.java" on the left and "Output" on the right. The "Main.java" panel contains the following code:

```
1 // Online Java Compiler
2 // Use this editor to write, compile and run your Java code online
3
4
5
6
7 - class HelloWorld {
8
9 - static void palindrome(int n){
10 int rev = 0, temp = n;
11 int sum = 0;
12 while(n>0)
13 {
14     rev = n%10;
15     sum=(sum*10)+rev;
16     n /= 10;
17 }
18 if(sum == temp)
19 System.out.println("palindrome");
20 else
21 System.out.println("not palindrome");
22 }
23
24
25 - public static void main(String[] args) {
26     palindrome(12321);
27 }
28 }
29
```

The "Output" panel shows the result of running the code:

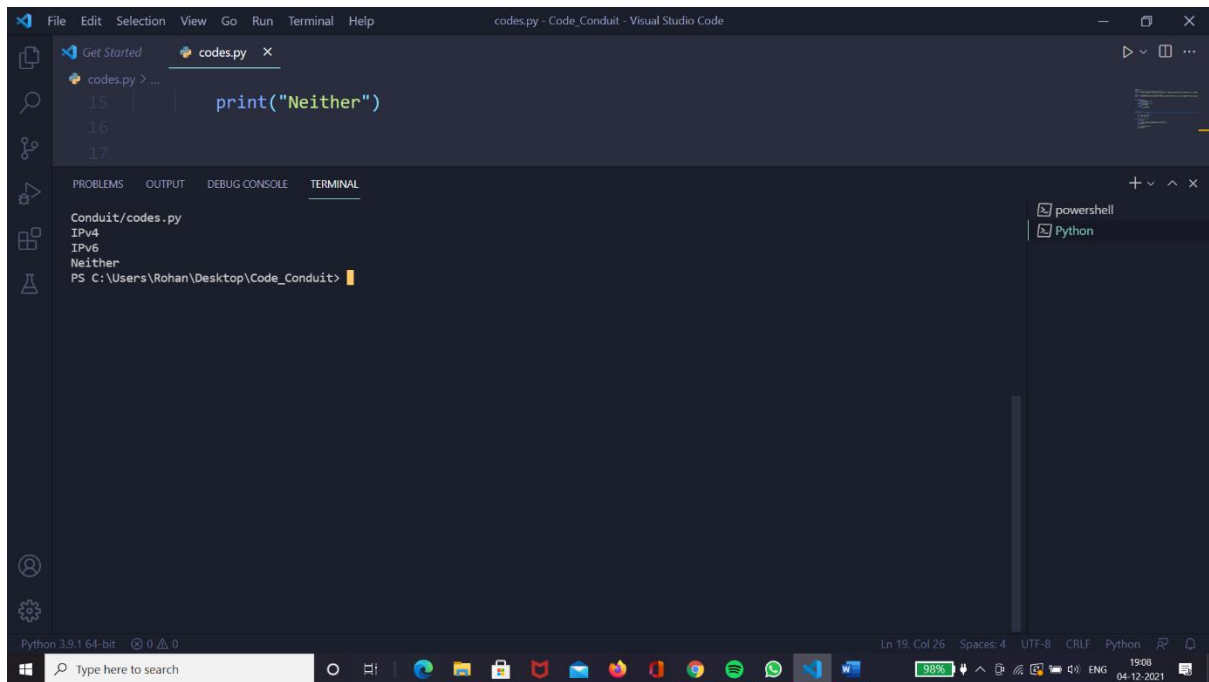
```
java -cp /tmp/gKJQZFw7wt HelloWorld
palindrome
```

Question: 2

Correct Code + Solution

```
File Edit Selection View Go Run Terminal Help codes.py - Code_Conduit - Visual Studio Code
codes.py x
codes.py > ...
1 import re
2 # Regular expression for validating an Ipv4
3 ipv4 = "^(25[0-5]|25[0-4][0-9]|[0-1]?[0-9][0-9]?)\.(25[0-5]|2[0-4][0-9]|[0-1]?[0-9][0-9]?)\.(25[0-5]|2[0-4][0-9]|[0-1]?[0-9][0-9]?)\.(25[0-5]|2[0-4][0-9]|[0-1]?[0-9][0-9]?)$"
4
5 # Regular expression for validating an Ipv6
6 ipv6 = "([0-9a-fA-F]{1,4}:){1,7}[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,7}:|([0-9a-fA-F]{1,4}:){1,6}:([0-9a-fA-F]{1,4}:){1,2}|([0-9a-fA-F]{1,4}:){1,5}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,4}:[0-9a-fA-F]{1,4}|([0-9a-fA-F]{1,4}:){1,4}:([0-9a-fA-F]{1,4}){2,5}|([0-9a-fA-F]{1,4}:){1,4}:[0-9a-fA-F]{1,4}([0-9a-fA-F]{1,4}){2,5}|([0-9a-fA-F]{1,4}:){1,4}:[0-9a-fA-F]{1,4}([0-9a-fA-F]{1,4}){2,5}|([0-9a-fA-F]{1,4}:){1,4}:[0-9a-fA-F]{1,4}([0-9a-fA-F]{1,4}){2,5}|([0-9a-fA-F]{1,4}:){1,4}:[0-9a-fA-F]{1,4}([0-9a-fA-F]{1,4}){2,5}|([0-9a-fA-F]{1,4}:){1,4}:[0-9a-fA-F]{1,4}([0-9a-fA-F]{1,4}){2,5}|([0-9a-fA-F]{1,4}:){1,4}:[0-9a-fA-F]{1,4}([0-9a-fA-F]{1,4}){2,5}"
7
8
9 def ip_type(Ip):
10     if re.search(ipv4, Ip):
11         print("IPv4")
12     elif re.search(ipv6, Ip):
13         print("IPv6")
14     else:
15         print("Neither")
16
17
18 # Driver Code
19 if __name__ == "__main__":
20
21     # Enter the Ip address
22     Ip = "192.0.2.126"
23
24     # calling run function
25     ip_type(Ip)
26
27     Ip = "3001:0da8:75a3:0000:0000:8a2e:0370:7334"
28     ip_type(Ip)
29
30     Ip = "36.12.08.20.52"
31     ip_type(Ip)
32
Python 3.9.1 64-bit 0 0 0
```

```
File Edit Selection View Go Run Terminal Help codes.py - Code_Conduit - Visual Studio Code
codes.py x
codes.py > ...
15     print("Neither")
16
17
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28     ip_type(Ip)
29
30     Ip = "36.12.08.20.52"
31     ip_type(Ip)
32
Python 3.9.1 64-bit 0 0 0
```



QUES 3

Correct Code + Solution

```
1 def lovely_list(lis):
2     n = len(lis)
3     for x in range(n):
4         flag = False
5         for j in range(0, n-1):
6             if lis[j] > lis[j+1]:
7                 lis[j], lis[j+1] = lis[j+1], lis[j]
8                 # print(lis)
9                 flag = True
10            if flag == False:
11                continue
12
13
14 tes_lis = [5, 28, 42, 75, 114, 16, 80]
15
16 lovely_list(tes_lis)
17 print("Sorted list :")
18 for i in range(len(tes_lis)):
19     print("%d" % tes_lis[i], end=" ")
20
```

Python 3.9.1 64-bit

File Edit Selection View Go Run Terminal Help

codes.py - Code_Conduit - Visual Studio Code

Ln 14, Col 39 Spaces: 4 UTF-8 CRLF Python

100% 19:29 04-12-2021

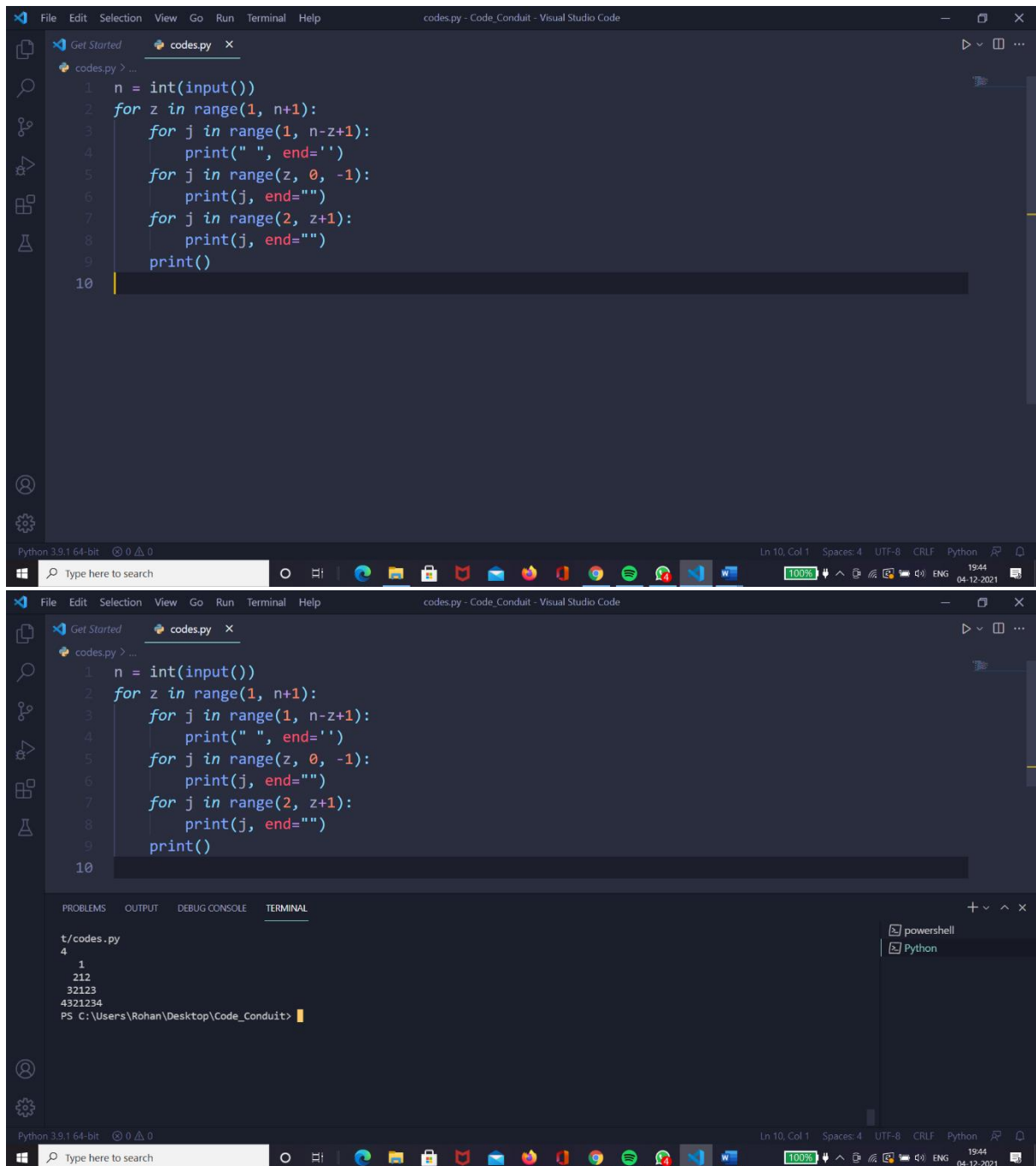
Conduit/codes.py

Sorted list :
5 16 28 42 75 80 114

PS C:\Users\Rohan\Desktop\Code_Conduit>

QUES 4

Correct Code + Solution



The image displays two screenshots of the Visual Studio Code editor interface. The top screenshot shows a Python script named `codes.py` with the following code:

```
1 n = int(input())
2 for z in range(1, n+1):
3     for j in range(1, n-z+1):
4         print(" ", end='')
5     for j in range(z, 0, -1):
6         print(j, end="")
7     for j in range(2, z+1):
8         print(j, end="")
9     print()
10
```

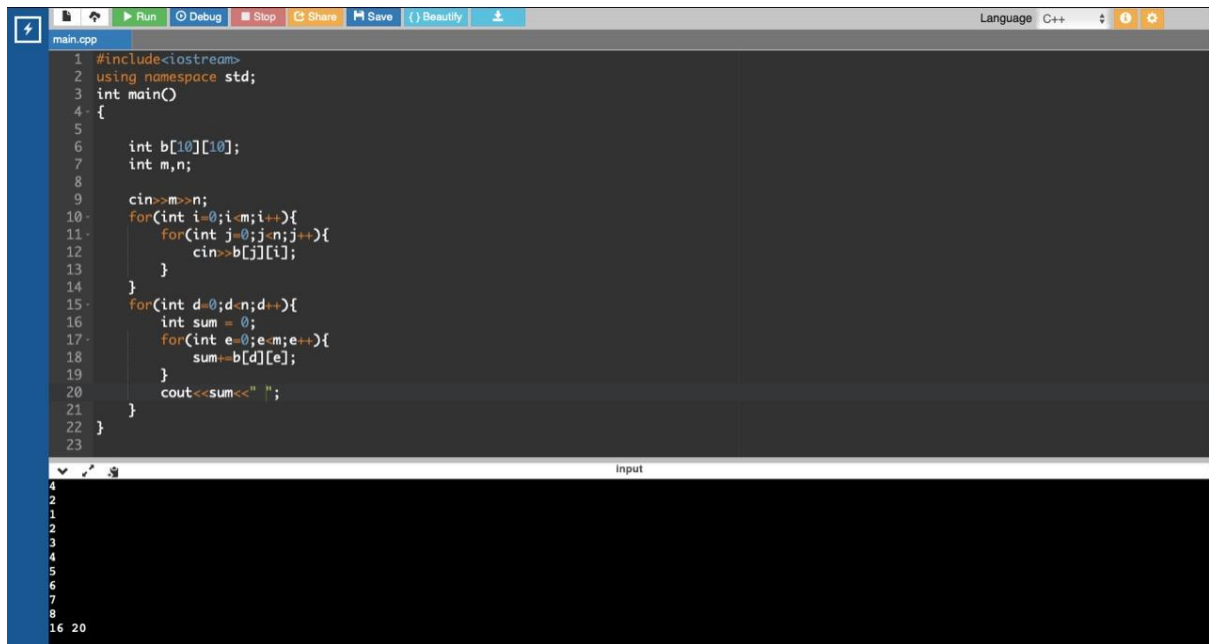
The bottom screenshot shows the same script with the terminal output at the bottom. The terminal displays the output of the script for `n=4`:

```
t/codes.py
4
1
212
32123
4321234
PS C:\Users\Rohan\Desktop\Code_Conduit>
```

The terminal also shows a list of installed extensions: `powershell` and `Python`.

QUES 5

Correct Code + Solution



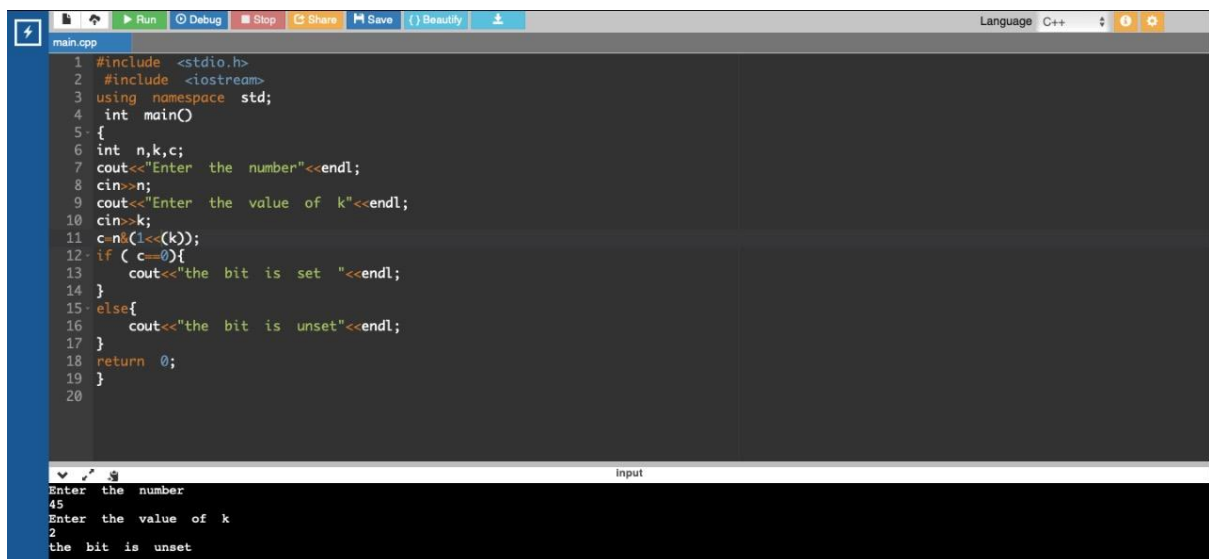
```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5
6     int b[10][10];
7     int m,n;
8
9     cin>>m>>n;
10    for(int i=0;i<m;i++){
11        for(int j=0;j<n;j++){
12            cin>>b[j][i];
13        }
14    }
15    for(int d=0;d<n;d++){
16        int sum = 0;
17        for(int e=0;e<m;e++){
18            sum+=b[d][e];
19        }
20        cout<<sum<<" ";
21    }
22 }
23
```

Input

4
2
1
2
3
4
5
6
7
8
16 20

QUES 6

Correct Code + Solution



```
1 #include <stdio.h>
2 #include <iostream>
3 using namespace std;
4 int main()
5 {
6     int n,k,c;
7     cout<<"Enter the number"<<endl;
8     cin>>n;
9     cout<<"Enter the value of k"<<endl;
10    cin>>k;
11    c=n<(1<<(k));
12    if ( c==0){
13        cout<<"the bit is set "<<endl;
14    }
15    else{
16        cout<<"the bit is unset"<<endl;
17    }
18    return 0;
19 }
20
```

Input

Enter the number
45
Enter the value of k
2
the bit is unset

QUES 7

Correct Code + Solution

The screenshot shows the Visual Studio Code editor with a file named `codes.py` open. The code defines a `binarySearch` function that takes `nums`, `min`, `max`, and `elem` as arguments. It calculates `mid = (max + min) // 2`. If `min > max`, it prints "Element is not present in array". If `elem < nums[mid]`, it recursively calls `binarySearch(nums, min, mid, elem)`. The terminal output shows the execution of the program, which prompts for an array and an element to search. The array is `[1, 2, 3, 4]` and the element is `3`. The output indicates that the element is present at index 2.

```
def binarySearch(nums, min, max, elem):
    mid = (max + min) // 2
    if(min > max):
        print("Element is not present in array")
    elif(elem < nums[mid]):
        binarySearch(nums, min, mid, elem)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Element is not present in array
PS C:\Users\Rohan\Desktop\Code_Conduit> & C:/Users/Rohan/AppData/Local/Programs/Python/Python39/python.exe c:/Users/Rohan/Desktop/Code_Conduit/codes.py
4
1
2
3
4
Initially array is: [1, 2, 3, 4]
element to be searched:3
3
Element is present at index 2
PS C:\Users\Rohan\Desktop\Code_Conduit>

The screenshot shows the Visual Studio Code editor with a file named `codes.py` open. The code defines a `binarySearch` function that takes `nums`, `min`, `max`, and `elem` as arguments. It calculates `mid = (max + min) // 2`. If `min > max`, it prints "Element is not present in array". If `elem < nums[mid]`, it recursively calls `binarySearch(nums, min, mid, elem)`. If `elem > nums[mid]`, it recursively calls `binarySearch(nums, mid+1, max, elem)`. If `elem == nums[mid]`, it prints "Element is present at index {min}". The code also prompts for an array and an element to search. The terminal output shows the execution of the program, which prompts for an array and an element to search. The array is `[1, 2, 3, 4]` and the element is `3`. The output indicates that the element is present at index 2.

```
def binarySearch(nums, min, max, elem):
    mid = (max + min) // 2
    if(min > max):
        print("Element is not present in array")
    elif(elem < nums[mid]):
        binarySearch(nums, min, mid, elem)
    elif(elem > nums[mid]):
        binarySearch(nums, mid+1, max, elem)
    else:
        print(f"Element is present at index {min}")
n = int(input())
nums = []
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Initially array is: [1, 2, 3, 4]
element to be searched:3
3
Element is present at index 2
PS C:\Users\Rohan\Desktop\Code_Conduit>