

```
# Python3 program to implement  
# the above approach
```

```
# Function to find minimum  
# number of fountains to be  
# activated
```

```
def minCntFoun(a, N):
```

```
    # dp[i]: Stores the position of
```

```
    # rightmost fountain that can
```

```
    # be covered by water of leftmost
```

```
    # fountain of the i-th fountain
```

```
    dp = [0] * N
```

```
    for i in range(N):
```

```
        dp[i] = -1
```

```
    # Traverse the array
```

```
for i in range(N):
```

```
    idxLeft = max(i - a[i], 0)
```

```
    idxRight = min(i + (a[i] + 1), N)
```

```
    dp[idxLeft] = max(dp[idxLeft],
```

```
        idxRight)
```

```
# Stores count of fountains
```

```
# needed to be activated
```

```
cntfount = 1
```

```
idxRight = dp[0]
```

```
# Stores index of next fountain
```

```
# that needed to be activated
```

```
idxNext = 0
```

```
# Traverse dp[] array
```

```
for i in range(N):
```

```
    idxNext = max(idxNext,
```

```
        dp[i])
```

```
    # If left most fountain
```

```
    # cover all its range
```

```
    if (i == idxRight):
```

```
        cntfount += 1
```

```
        idxRight = idxNext
```

```
return cntfount
```

```
# Driver code
```

```
if __name__ == '__main__':
```

```
    a = [1, 2, 1]
```

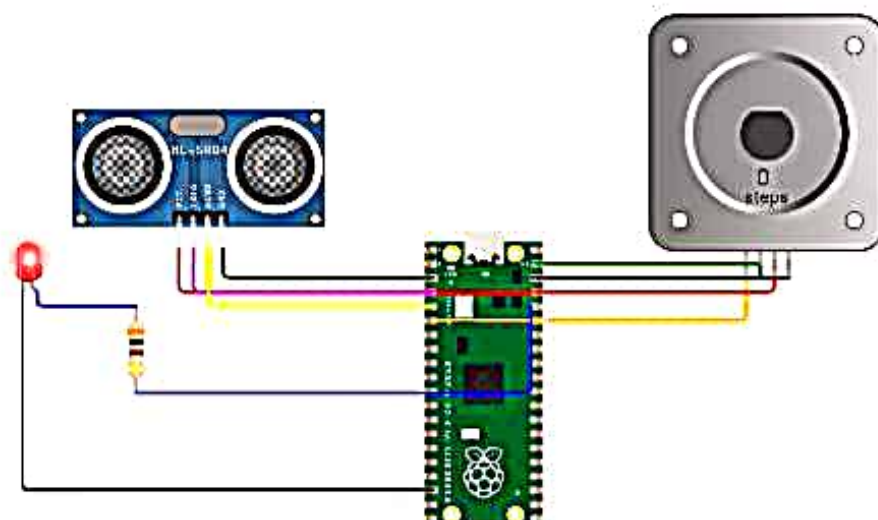
```
N = len(a)
```

```
print(minCntFoun(a, N))
```

```
# This code is contributed by Shivam
```



output



```
Traceback (most recent call last):
  File "main.py", line 10, in <module>
>
NameError: name 'Ultrasonic' isn't de
fined
MicroPython v1.21.0 on 2023-10-06; Ra
spberry Pi Pico with RP2040
Type "help()" for more information.
>>> □
```