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|---|---|
| **Started on** | Friday, 9 August 2024, 2:30 PM |
| **State** | Finished |
| **Completed on** | Friday, 9 August 2024, 2:34 PM |
| **Time taken** | 3 mins 34 secs |
| **Marks** | 1.00/1.00 |
| **Grade** | **10.00** out of 10.00 (**100**%) |

Question **1**

Correct

Mark 1.00 out of 1.00

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Convert the following algorithm into a program and find its time complexity using counter method.
 Factor(num) {
 {
    for (i = 1; i <= num;++i)
    {
     if (num % i== 0)
        {
          printf("%d ", i);
        }
     }
  }

Note: No need of counter increment for declarations and scanf() and counter variable printf() statement.

Input:
 A positive Integer n
Output:
Print the value of the counter variable

---

**Answer:**

```
1   #include<stdio.h>
2   void Factor(int num)
3 ▾ {
4       int c=0;
5       for (int i = 1; i <= num;++i)
6 ▾     {
7           c++;
8         if (num % i== 0)
9 ▾         {
10
11              //printf("%d ", i);
12              c++;
13          }
14          c++;
15      }
16      c++;
17      printf("%d",c);
18  }
19  int main()
20 ▾ {
21      int n;
22      scanf("%d",&n);
23      Factor(n);
24  }
```

| | Input | Expected | Got | |
|---|---|---|---|---|
| ✔ | 12 | 31 | 31 | ✔ |
| ✔ | 25 | 54 | 54 | ✔ |
| ✔ | 4 | 12 | 12 | ✔ |

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Jump to...

Correct

Marks for this submission: 1.00/1.00.