ESC101 - QUIZ 1 Session 2

Total points (2)



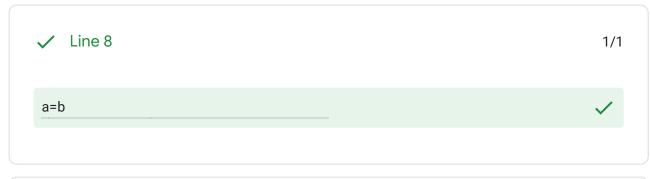
The quiz will be conducted in two sessions of 20 minutes each with a gap of 10 minutes in between two sessions.

Read all instructions mentioned in the problem statement carefully before attempting it and try to keep your answers precise. Make sure to submit your response on time. Autosubmission is not available and if you fail to submit on time, you will get zero marks. If there are any issues like internet/power outage contact your Tutor ASAP.

Email address *	
harshitr20@iitk.ac.in	
	0 of 0 points
Name *	
Harshit Raj	
Roll no *	
200433	
Problem 4	5 of 5 points

Complete the following function, fib, to calculate n-th number of this Fibonacci series 1,1,2,3,5,8 ...

```
Code
1. #include<stdio.h>
3. int fib(int n){
4. int a=1,b=1,c;
 5. if(_____) return 1;
 6. for (int i=0;i<____;i++){
<sup>7</sup>. _____;
9. ____;
10. }
 11. return c;
 12. }
✓ Line 5
                                                                 1/1
(n==1)||(n==2)
Correct answers
n<3
n < 3
✓ Line 6
                                                                 1/1
n-2
✓ Line 7
                                                                 1/1
c=a+b
```





Problem 5 5 of 5 points

In the following questions, predict the output. If no output is printed, write "NO OUTPUT". If the program runs into compilation error, write "ERROR". If the program results in an infinite loop, write "INFINITE LOOP".

```
#include<stdio.h>
int main() {
   int i;
   if(true)
       printf("True");
   else
       printf("False");
   return 0;
}
ERROR
```

```
#include<stdio.h>
int main() {
   int i;
   if('True')
       printf("True");
   else
       printf("False");
   return 0;
}
```

```
#include<stdio.h>
int main() {
    while(printf("%d", 5) < 4)
        printf("Loop ");
    return 0;
}</pre>
INFINITE LOOP
```

```
✓ 5.d.
                                             1/1
 #include<stdio.h>
 int main()
      int i = 0;
      while (i < 4, i \ge 4)
         printf("Loop ");
         i++;
      return 0;
NO OUTPUT
Correct answer
NO OUTPUT
```

Problem 6 2 of 2 points

✓ Write the output of the following C program.

2/2

```
#include <stdio.h>
 1
 2
 3
     int main()
 4
 5
         int i,j;
 6
 7
         for (i = 0; i < 6; i++)
 8
             for (j = 0; i < 3; i++)
10
             printf("%d ", j);
11
12
13
14
15
         return 0;
16
```

000

X

Correct answer

000

Problem 7 4 of 4 points

We are trying to find if a number is a perfect number or not. A positive integer is called a perfect number if the sum of proper divisors of that number is equal to the number itself. The proper divisors of a number are all those numbers, except the number itself, which divide that number. Thus, 1 is a proper divisor of every number but 1 itself. For example, the proper divisors of 6 are: 1, 2, and 3. Clearly, 6 = 1 + 2 + 3. Thus, 6 is a perfect number.

Complete the following code so that it outputs YES if the input positive integer is perfect and NO otherwise.

```
#include <stdio.h>
 1
 2
 3 \sim int main(){
         int a, i;
         long sum = 0;
 5
         scanf("%d", &a);
 6
 7
         if(a != 1)
 8 ~
 9
            . . . . . . . ;
      for(i = 2; .....; i++)
10 🗸
            if(....)
11 🗸
                sum += i;
12
      if(....)
13 🗸
            printf("YES");
14
       else
15 🗸
            printf("NO");
16
17
         return 0;
18
19
    }
20
```

```
✓ Line 9

1/1

sum=1

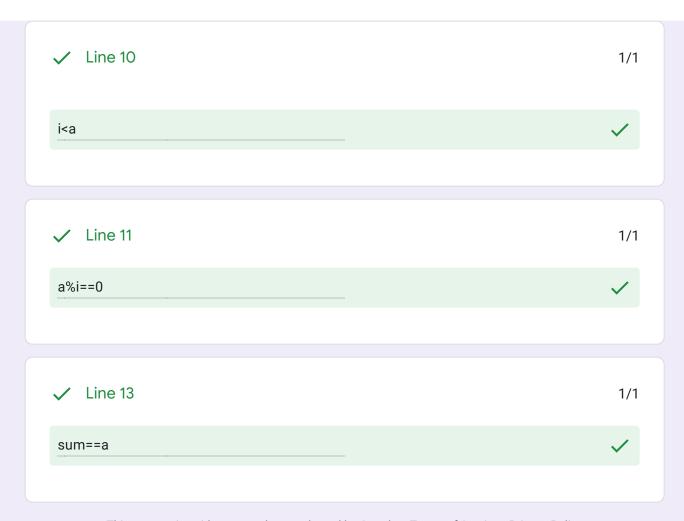
Correct answers

sum = sum + 1

sum += 1

sum=sum+1

sum+=1
```



This content is neither created nor endorsed by Google. - <u>Terms of Service</u> - <u>Privacy Policy</u>

Google Forms