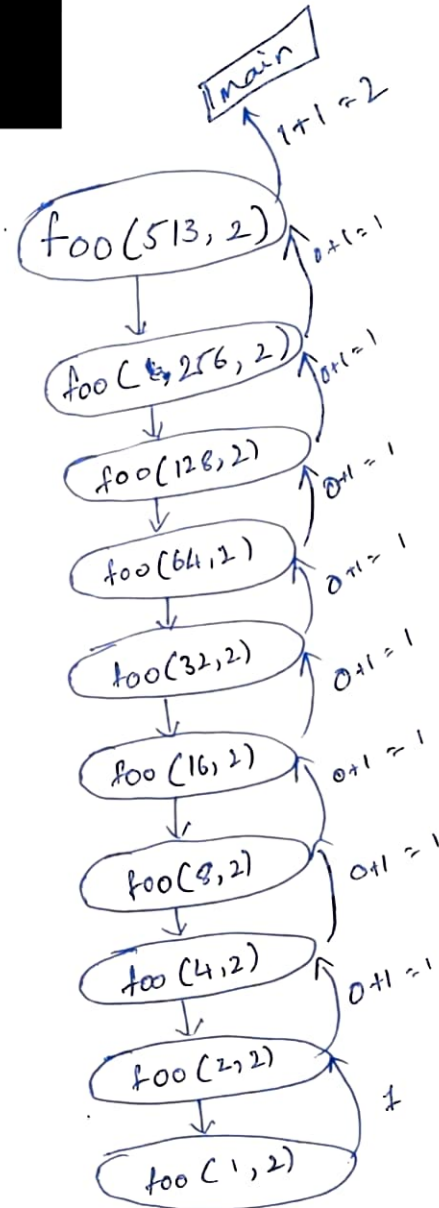


Code:

```
foo(int n, int r){  
    if(n>0)  
        return (n%r + foo(n/r, r));  
    else return 0;  
}
```

```
main(){  
    print(foo(513, 2));  
}
```

- A) 9
- B) 8
- C) 5
- D) 2



$\exists n \% r + foo(n/r)$

D) 2 is the answer.

code:

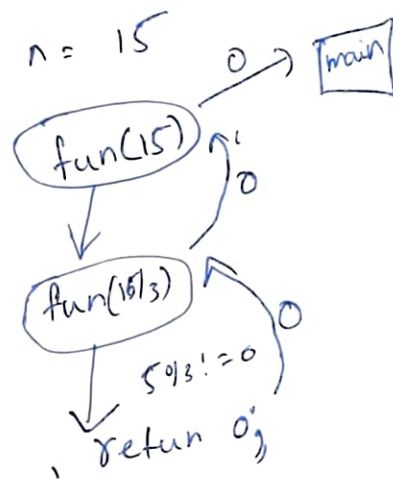
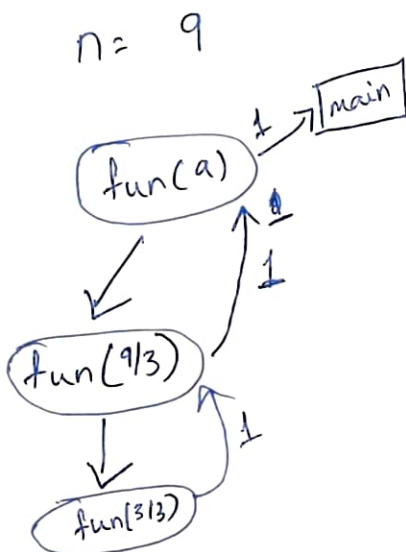
What does the following function do?

```
int fun(unsigned int n)
{
    if (n == 0 || n == 1)
        return n;

    if (n%3 != 0)
        return 0;

    return fun(n/3);
}
```

- ☒ A It returns 1 when n is a multiple of 3, otherwise returns 0
- ☒ B It returns 1 when n is a power of 3, otherwise returns 0
- ☐ C It returns 0 when n is a multiple of 3, otherwise returns 1
- ☐ D It returns 0 when n is a power of 3, otherwise returns 1



$\therefore$  B) It returns 1 when n is a power of 3, otherwise returns 0.

