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Matthew Koken
COEN 171
Quiz 5
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}

fib(4)

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1)
       void printArgs(int numArgs, char* args[]) {
               for(int i=0; i<numArgs; i++)
                      printf(args[i]);
       }
2)
       void func1(void (*f)()) {
               f();
       }
       void func2() {
               printf("Hello, world! I'm inside func1");
       }
3)
       func1(&func2);
4)
       int func(int a, int b){
               int c=a+b;
               return c;
       }
                       a
                       b
                       C
                       bl caller
5)
       int fib( int n){
               if n<2 return n;
               else return fib(n-1)+fib(n-2)
```

fib	n=4	
	bl caller	Return value: 3
fib	n=3	
	bl fib	Return value: 2
fib	n=2	
	bl fib	Return value: 1

fib	n=1	
	bl fib	Return value: 1
fib	n=0	
	bl fib	Return value: 0
fib	n=1	
	bl fib	Return value: 1
fib	n=2	
	bl fib	Return value: 1
fib	n=1	
	bl fib	Return value: 1
fib	n=0	
	bl fib	Return value: 0

```
6)
    fib_tail(int n, int a, int b) { //fib_tail(4, 1, 0);
        if(n==0) return b;
        else fib(n-1, a+b, a);
        //more elegant: return n== 0 ? b : fib(n-1, a+b, a);
}
```

7)

fib_tail	n=4	
	a=1	
	b=0	
	Bl caller	
fib_tail	n=3	
	a=1	
	b=1	
	bl fib_tail	
fib_tail	n=2	
	a=2	
	b=1	
	bl fib_tail	
fib_tail	n=1	
	a=3	
	b=2	
	bl fib_tail	

fib_tail	n=0	
	a=5	
	b=3	
	bl fib_tail	Return value: 3