

• 문항 선택

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8

한 문제씩 검토

검토 완료

강의실 홈

강의정보

- 교수계획표 (국문)
- 교수계획표 (영문)

성적/출석관리

- 동영상이수현황
- 스마트출석부
- 성적부

수강생 알림

- 쪽지 보내기

기타 관리

학습활동

/ 프로그래밍원리와실습 (CB16702-003) / [Q4:8]

시작 일시	2022-09-23 19:27
진행 상황	종료됨
완료 일시	2022-09-24 15:40
소요시간	20 시간 13 분
성적	최고 8.00점 중 7.00점 (88%)

문제 1

정답

총 1.00 점에서  
1.00 점 할당

문제 표시

What is the output of the following program ?

[1]: 5 [2]: 8

Execution Result

nx = [1], ny = [2]

```
#include <stdio.h>
int foo(int nx)
{
    nx = nx - 1;
    return 2*nx;
}

int main(void)
{
    int nx = 5, ny;

    ny = foo(nx);

    printf("nx = %d, ny = %d\n", nx, ny);

    return 0;
}
```

문제 2

정답

총 1.00 점에서  
1.00 점 할당

문제 표시

Complete the source code below by entering a proper keyword and choosing a proper code.

[1]: void

[2]:

- ☐ my\_main;
- ☐ my\_main(void);
- ☒ my\_main();
- ☐ my\_main(0);

총 1.00 점에서 1.00 점 할당

정답: my\_main();

Execution Result

Hello, World.

```
#include <stdio.h>
[1] my_main(void)
{
    printf("Hello, World.\n");
    return;
}

int main(void)
{
    [2]
    return 0;
}
```

문제 3

정답

총 1.00 점에서  
1.00 점 할당

문제 표시

Write the output of the following program

[1]: 4 [2]: 2 [3]: 1 [4]: 3

Execution Result

[1] [2] [3] [4]

```
#include <stdio.h>
double square(double x) {
    printf("1 ");
    return x * x;
}

double cube(double x) {
    printf("2 ");
    return x * square(x);
}

double pi(double x) {
    printf("3 ");
    return 3.14 * x;
}

double sphere(double r) {
    printf("4 ");
    return 4.0 / 3.0 * pi(cube(r));
}

int main(void) {
    double radius = 1.5;
    double volume;

    volume = sphere(radius);
    return 0;
}
```

문제 4

정답

총 1.00 점에서  
1.00 점 할당

문제 표시

A recursive function is a function which calls itself.

The "factorial()" function in the source code below is an example of it.

```
#include <stdio.h>
int factorial(int n)
{
    if( n==0 ) return 1;
    return n*factorial(n-1);
}

int main(void)
{
    printf("%d\n", factorial(5));
    return 0;
}
```

문제 5

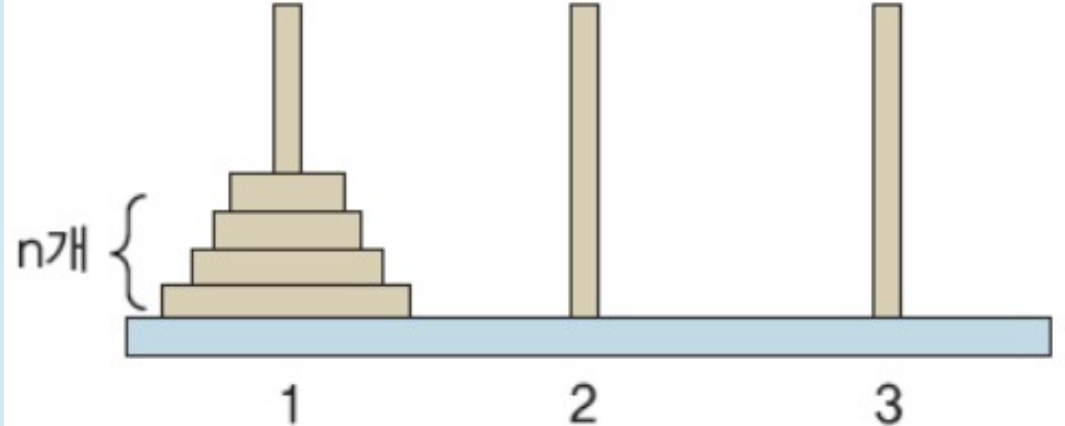
정답

총 1.00 점에서  
1.00 점 할당

문제 표시

The Hanoi Tower is a mathematical game or puzzle. It consists of three rods and a number of disks of different sizes. The puzzle starts with the disks stacked in a rod in the ascending order of disk size as shown in the picture. We want to move the Tower of Hanoi, which consists of  $n$  discs in the first rod, to the third rod obeying the following simple rules.

1. Only one disk can be moved at a time
2. Each move consists of taking the upper disk from one of the stacks and placing it on top of another stack or on an empty rod.
3. No disk may be placed on top of a smaller disk.



How do we move the discs?

Resolve the minimum number of disk moves required to move all  $n$  disks in the first rod to the third rod. 2

1.  $2 \cdot n - 1$
2.  $2^n - 1$
3.  $n \times (2 \cdot n - 1)$
4.  $n^2 + n - 1$

문제 6

정답

총 1.00 점에서  
1.00 점 할당

문제 표시

Fill in the blanks with proper words.

- Function Prototype - Remove Body from Function Definition and leave only Header that specifies the function's name and type signature.
- Abstraction is the process of generalization by reducing the information content of a concept or an observable phenomenon, typically in order to retain only information which is relevant for a particular purpose
- In computer science, separation of interface from Implementation is the key concept for abstraction.
- API = Application Programming Interface
- In terms of Scope, variables can be classified into two types.

In the case of a variable declared in a function area, it is valid within the function and is called a Local variable

If a variable is declared outside the function, it is valid in the entire function of the source file and is called a Global variable

문제 7

틀림

총 1.00 점에서  
0.00 점 할당

문제 표시

We got the following warning and error messages for the following source code.

- main.c:15:29: warning: implicit declaration of function 'divide'
- main.c:19:8: error: conflicting types for 'divide'

Fill in the blank so that we can get rid of those warning and error.

```
#include <stdio.h>

float divide(int, int); float divide (int x, int y);

int main(void)
{
    int a, b;
    scanf("%d%d", &a, &b);
    printf("a / b == %f\n", divide(a,b) );
    return 0;
}

float divide(int x, int y)
{
    return (float)x/y;
}
```

문제 8

정답

총 1.00 점에서  
1.00 점 할당

문제 표시

Write the output of the following program.

[1]: 3 [2]: 2

Execution Result

nx=[1], gSum=[2]

```
#include <stdio.h>
int gSum;
int foo1(int n)
{
    gSum = gSum + n;
    return (gSum + 1);
}

int foo2(int n)
{
    int gSum = n;
    return (gSum + 1);
}

int main(void)
{
    int nx;
    gSum = 0;
    nx = foo1(foo2(1));
    printf("nx=%d,gSum=%d\n", nx,gSum);
    return 0;
}
```

검토 완료