Started on	Thursday, 22 October 2020, 2:25 AM
State	Finished
Completed on	Thursday, 22 October 2020, 2:39 AM
Time taken	13 mins 44 secs
Marks	9.67/15.00
Grade	**64.44** out of 100.00

Question 1

Partially correct

Mark 0.17 out of 1.00

If `a` is an `int` and `p` points to `a`, then which of the follow expressions will give us `a`?

Select all that apply:

- [x] `*p` ✔
- [ ] `&p`   cross out
- [x] `&*a` ✖   cross out
- [ ] `*&a`   cross out
- [ ] `**&p`   cross out
- [x] `*&*p` ✔   cross out
- [ ] `&*&p`   cross out

cross out (for `*p`)

Your answer is partially correct.

Click "Next page" to continue

The correct answers are: `*p`, `*&a`, `**&p`, `*&*p`

Question 2

Correct

Mark 1.00 out of
1.00

How many times will the for-loop body in function "g()" execute?

```
int i;

void f() {
  for (i = 1; i <= 10; ++i) {
    printf("*");
  }
}

void g() {
  // How many times will this for-loop body execute?
  for (i = 1; i <= 5; ++i) {
    f();
    printf("\n");
  }
}

int main() {
  g();
  return 0;
}
```

Select one:

- ○ 1 ✔   **cross out**
- ○ 5   **cross out**
- ○ 15   **cross out**
- ○ 10   **cross out**
- ○ 0   **cross out**

Your answer is correct.

Click "Next page" to continue

The correct answer is: 1

Question 2

Correct

Mark 1.00 out of
1.00

How many times will the for-loop body in function "g()" execute?

```
int i;

void f() {
  for (i = 1; i <= 10; ++i) {
    printf("*");
  }
}
```

Question 3

Incorrect

Mark 0.00 out of 1.00

What is the output of the following program?

```c
#include <stdio.h>
int i = 0;

int f(int n) {
  i = 10 + i;
  int i = 20;
  return ++n;
}

int main() {
  f(i);
  printf("%d\n", i + 1);
  return 0;
}
```

Select one:

- ○ 0   **cross out**
- ○ 1   **cross out**
- ◉ 2 ✘   **cross out**
- ○ 10   **cross out**
- ○ 11   **cross out**
- ○ 20   **cross out**
- ○ 21   **cross out**
- ○ This program will not compile   **cross out**

Your answer is incorrect.

Click "Next page" to continue

The correct answer is: 11

Question 4

Correct

Mark 1.00 out of 1.00

Consider the following function prototype.

```c
int f(int n, int arr[]);
```

Inside the function, the length of `arr` can be determined by using `sizeof(arr) / sizeof(int)`.

Select one:

- ○ True   **cross out**
- ◉ False ✔   **cross out**

Your answer is correct.

Click "Next page" to continue

The correct answer is: False

Question 3

Incorrect

Mark 0.00 out of 1.00

What is the output of the following program?

```c
#include <stdio.h>
int i = 0;
```

```c
int f(int n) {
```

```c
  int i = 20;
```

```c
  return ++n;
```

```c
}
```

```c
int main() {
```

```c
  printf("%d\n", i + 1);
```

```c
  return 0;
```

```c
}
```

Question 5

Correct

Mark 1.00 out of 1.00

Consider the following function:

```
void magic(int x, int y) {
  int temp = x;
  x = y;
  y = temp;
}
```

And suppose that the function is called as follows:

```
int x = 50;
int y = 75;
magic(x, y);
```

What are the values of x and y afterwards, respectively?

Select one:

○	75 and 50	**cross out**
○	75 and 75	**cross out**
⦿	50 and 75 ✔	**cross out**
○	50 and 50	**cross out**

Your answer is correct.

Click "Next page" to continue

The correct answer is: 50 and 75

Question 6

Correct

Mark 1.00 out of 1.00

Consider the following function:

```
void copy_x(int x, int y)
{
  y = x;
}
```

And suppose that the function is called as follows:

```
int x = 5;
int y = 0;
copy_x(x, y);
```

What are the values of x and y afterwards, respectively?

Select one:

○	0 and 0	**cross out**
⦿	5 and 0 ✔	**cross out**
○	0 and 5	**cross out**
○	5 and 5	**cross out**

Your answer is correct.

Click "Next page" to continue

The correct answer is: 5 and 0

Question 7

Correct

Mark 1.00 out of 1.00

Can a function take a variable-length array as a function argument as follows?

```
void f(int arr[n], int n);
```

Select one:

- ○ Yes. C99 supports variable-length arrays as in the above function declaration. **cross out**
- ○ No. The length of the array must be known at compile time. **cross out**
- ○ No. Arrays are not acceptable as function arguments. **cross out**
- ⦿ No. The order of the arguments is incorrect. ✔ **cross out**

Your answer is correct.

Click "Next page" to continue

The correct answer is: No. The order of the arguments is incorrect.

Question 8

Correct

Mark 1.00 out of 1.00

What is the conversion specifier for a number in base 8?

Select one:

- ○ `%8` **cross out**
- ⦿ `%o` ✔ **cross out**
- ○ `%d` **cross out**
- ○ `%x` **cross out**

Your answer is correct.

Click "Next page" to continue

The correct answer is: `%o`

Question 9

Correct

Mark 1.00 out of 1.00

Considering the bit storage for floating point numbers, if the value `5.0` is stored in a `float`, what is the value of its exponent?

Select one:

- ○ 0 **cross out**
- ○ 128 **cross out**
- ⦿ 129 ✔ **cross out**
- ○ 254 **cross out**
- ○ 255 **cross out**

Your answer is correct.

Click "Next page" to continue

The correct answer is: 129

Question 10

Incorrect

Mark 0.00 out of 1.00

Suppose we have two `int` called `p` and `q`. How can we change the address of `p` to match the address of `q`?

Select one:

- ○ `&p = &q` **cross out**
- ○ `&p = *q` **cross out**
- ⦿ `*p = &q` ✖ **cross out**
- ○ `*p = *q` **cross out**
- ○ You cannot change the address of `p` **cross out**

Your answer is incorrect.

Click "Next page" to continue

The correct answer is: You cannot change the address of `p`

Question 11

Partially correct

Mark 0.50 out of 1.00

Which, if any, of the following function prototypes will prevent us from changing the integer pointed to by `a`?

Select all that apply:

☐   `void f(int *a);`   **cross out**

☑   `void f(const int *a);` ✔   **cross out**

☑   `void f(int * const a);` ✘   **cross out**

☑   `void f(const int * const a);` ✔   **cross out**

Your answer is partially correct.

Click "Next page" to continue

The correct answers are: `void f(const int *a);`, `void f(const int * const a);`

Question 12

Incorrect

Mark 0.00 out of 1.00

Suppose we have the following declarations:

`int a, *p;`

How can we make `p` point to `a`?

Select one:

○   `p = &a;`   **cross out**

◉   `*p = &a;` ✘   **cross out**

○   `&p = *a;`   **cross out**

○   `p = *a;`   **cross out**

Your answer is incorrect.

Click "Next page" to continue

The correct answer is: `p = &a;`

Question 13

Incorrect

Mark 0.00 out of 1.00

Which of the following declarations could we consider a pointer to a pointer to an `int` variable?

Select one:

◉   `int *p` ✘   **cross out**

○   `int *p &`   **cross out**

○   `int &&p`   **cross out**

○   `int* *p`   **cross out**

○   None of the above are valid ways to create the desired pointer.   **cross out**

○   You cannot create pointers to other pointers.   **cross out**

Your answer is incorrect.

Click "Next page" to continue

The correct answer is: `int* *p`

Question 14

Correct

Mark 1.00 out of 1.00

Suppose we have the following declarations:

```
int a;
int *p = &a;
```

Which of the following are valid ways to read an `int` from `stdin` into `a`?

Select all that apply:

- ☑   `scanf("%d", &a);` ✔   **cross out**
- ☐   `scanf("%d", a);`   **cross out**
- ☐   `scanf("%d", *a);`   **cross out**
- ☐   `scanf("%d", &p);`   **cross out**
- ☑   `scanf("%d", p);` ✔   **cross out**
- ☐   `scanf("%d", *p);`   **cross out**

Your answer is correct.

Click "Next page" to continue

The correct answers are: `scanf("%d", &a);`, `scanf("%d", p);`

Question 15

Correct

Mark 1.00 out of 1.00

Suppose, given some variable `a`, we have the following pointer declaration:

```
int *p = &a;
```

Which of the following is the expression `&*&*&*p` equivalent to?

Select all that apply:

- ☑   `p` ✔   **cross out**
- ☐   `&&p`   **cross out**
- ☐   `&p`   **cross out**
- ☐   `*p`   **cross out**
- ☑   `&(*p)` ✔   **cross out**

Your answer is correct.

Click "Next page" to continue

The correct answers are: `p`, `&(*p)`

◄ Practice Quiz #6 (up to Lecture 16/Chap 12)   Jump to...   Lab #7 D03 submission page ►