

EECS 10: Computational Methods in Electrical and Computer Engineering

Quiz on Lectures 9-17

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Quiz: Question 1

- Which of the following expressions would be treated as a true condition when used with an `if` statement?
(Check all that apply!)

- a) `(int)5.5 > 5`
- b) `1 || 0 && 0`
- c) `5 == 5`
- d) `(1 + 2 + 3) == (3 << 2 >> 1)`
- e) `5 - 5`

Quiz: Question 1

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Quiz: Question 2

- If `cnt` is an integer counter, how could one update the value of `cnt`?
(Check all that apply!)

- a) `cnt += 1;`
- b) `++cnt;`
- c) `cnt++;`
- d) `cnt += cnt;`
- e) `cnt = cnt + 1;`

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Quiz: Question 3

- What is the value of `x` after the following code fragment is executed?

```
int x = 0;
for(x = 1; x <= 10; x++)
{ }
```

- a) 0
- b) 1
- c) 9
- d) 10
- e) 11

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Quiz: Question 3

- What is the value of x after the following code fragment is executed?

```
int x = 0;
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- d) 10
-  e) 11

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Quiz: Question 4

- What is the value of x after the following code fragment is executed?

```
int x = 0;
do { x++;
    } while(x < 10);
```

- a) 0
- b) 1
- c) 9
- d) 10
- e) 11

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Quiz: Question 4

- What is the value of x after the following code fragment is executed?

```
int x = 0;
do { x++;
    } while(x < 10);
```

- a) 0
- b) 1
- c) 9
-  d) 10
- e) 11

Quiz: Question 5

- What is the value of x after the following code fragment is executed?

```
int x = 10;
while(x >= 0)
{ x -= 2;
}
```

- a) -2
- b) -1
- c) 0
- d) 1
- e) 2

Quiz: Question 5

- What is the value of x after the following code fragment is executed?

```
int x = 10;
while(x >= 0)
{ x -= 2;
}
```

- a) -2
- b) -1
- c) 0
- d) 1
- e) 2

Quiz: Question 6


- Given the following function g , what is the result of $g(85)$?

- a) 'A'
- b) 'B'
- c) 'C'
- d) 'D'
- e) 'F'

```
char g(int n)
{
    switch(n/10)
    { case 10:
      case 9: return('A');
      case 8: return('B');
      case 7: return('C');
      case 6: return('D');
      default: return('F');
    }
}
```

Quiz: Question 6

- Given the following function `g`, what is the result of `g(85)`?

- a) 'A'
-  b) 'B'
- c) 'C'
- d) 'D'
- e) 'F'

```
char g(int n)
{
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    { case 10:
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      case 8: return('B');
      case 7: return('C');
      case 6: return('D');
      default: return('F');
    }
}
```

Quiz: Question 7

- What is output by the following C statement?


```
printf("x = %03d.", 3 + 4);
```

- a) **x = 034**
- b) **x = 007**
- c) **x = 00007**
- d) **x = 7**
- e) **x = 3 + 4**

Quiz: Question 7

- What is output by the following C statement?

```
printf("x = %03d.", 3 + 4);
```


- a) `x = 034`
-  b) `x = 007`
- c) `x = 00007`
- d) `x = 7`
- e) `x = 3 + 4`

Quiz: Question 8

- In the `gdb` debugger, what does `next` do?

- a) It moves to the next argument of the function.
- b) It executes the next statement in the program.
- c) It calls the next function in the program.
- d) It prints the value of the next variable.
- e) It loads the next program into the debugger.

Quiz: Question 8

- In the `gdb` debugger, what does `next` do?
 - a) It moves to the next argument of the function.
 -  b) It executes the next statement in the program.
 - c) It calls the next function in the program.
 - d) It prints the value of the next variable.
 - e) It loads the next program into the debugger.

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Quiz: Question 9

- Given the following code fragment, which of the following statements are true?
(Check all that apply!)

- a) Function `g` calls function `f`
- b) Variable `z` is a local variable of function `g`
- c) Function `f` is declared.
- d) Function `g` is declared and defined.
- e) `i` is a parameter of function `f`.

```
double f(int i);
void g(int x, int y)
{
    int z;

    z = f(x) + 2*y;
    return z;
}
```

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Quiz: Question 9

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(Check all that apply!)

```
double f(int i);  
void g(int x, int y)  
{  
    int z;  
  
    z = f(x) + 2*y;  
    return z;  
}
```

- a) Function `g` calls function `f`
- b) Variable `z` is a local variable of function `g`
- c) Function `f` is declared.
- d) Function `g` is declared and defined.
- e) `i` is a parameter of function `f`.

Quiz: Question 10

- Given that the C standard math library is included, which of the following equations results in the value `4.0`?
(Check all that apply!)

- a) `pow(16.0, .5)`
- b) `4.0 * cos(0)`
- c) `3 + sin(0)`
- d) `log10(10000.00)`
- e) `sqrt(9.0) + 1`

Quiz: Question 10

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Quiz: Question 11

- Given the following program fragment, what is the value of `g(4, f(3, 2))`?

- a) 8
- b) 9
- c) 10
- d) 11
- e) 12

```
int x = 1;

int f(int x, int y)
{
    return x + y;
}

int g(int x, int y)
{
    return f(x, y);
}
```


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Quiz: Question 11

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- a) 8
-  b) 9
- c) 10
- d) 11
- e) 12

```
int x = 1;

int f(int x, int y)
{
    return x + y;
}

int g(int x, int y)
{
    return f(x, y);
}
```

Quiz: Question 12

- What is output by the following program fragment?

- a) **EECS00 1**
- b) **EECS100**
- c) **E E**
- d) **EECS C**
- e) **EECS10 C**


```
char s[] = "EECS10";

s[4] = 0;
printf("%s %c", s, s[2]);
```

Quiz: Question 12

- What is output by the following program fragment?

```
char s[] = "EECS10";  
s[4] = 0;  
printf("%s %c", s, s[2]);
```

- a) EECS00 1
- b) EECS100
- c) E E
-  d) **EECS C**
- e) EECS10 C