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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  (Check all that apply!)

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  c) `5 == 5`
  d) `(1 + 2 + 3) == (3 << 2 >> 1)`
  e) `5 - 5`

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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 2

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

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`

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

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 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(80)**?

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(80)?

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

```c
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 7

- What is output by the following C statement?

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

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

Quiz: Question 7

- What is output by the following C statement?

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

  a) `x = 3 + 4`

  b) `x = 007`

  c) `x = 00007`

  d) `x = 7`

  e) `x = -7`

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.

Quiz: Question 9

- Given the following code fragment, which of the following statements are true? (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 defined.
  d) Function **g** is declared and defined.
  e) **i** is a parameter of function **f**.

Quiz: Question 9

- Given the following code fragment, which of the following statements are true?
  (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 defined.

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 **3.0**?
  (Check all that apply!)

a) **pow(9.0, .5)**

b) **3 * cos(0)**

c) **3 + sin(0)**

d) **log10(1000.000)**

e) **sqrt(9.0)**

Quiz: Question 10

- Given that the C standard math library is included, which of the following equations results in the value **3.0**?
  (Check all that apply!)

  a) `pow(9.0, .5)`
  b) `3 * cos(0)`
  c) `3 + sin(0)`
  d) `log10(1000.000)`
  e) `sqrt(9.0)`

Quiz: Question 11

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

  a) 9
  b) 12
  c) 14
  d) 15
  e) 8

```
int x = 1;

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

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

Quiz: Question 11

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

a) **9**
b) 12
c) 14
d) 15
e) 8

```
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 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) **EECS10 C**
e) **EECS C**

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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) EECS10 C

e) **EECS C**