

EECS 10: Computational Methods in Electrical and Computer Engineering

Quiz on Lectures 1-8

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Quiz: Question 1

- Today's computers run at which clock speed?
 - a) 10 kHz
 - b) 1 ms
 - c) 1 GHz
 - d) 100 km/h
 - e) 1 MHz

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Quiz: Question 2

- Which Unix command shows you the contents of the current directory?
 - a) `pwd`
 - b) `ls`
 - c) `dir`
 - d) `list`
 - e) `cd`

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
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Quiz: Question 2

- Which Unix command shows you the contents of the current directory?

a) `pwd`

 b) `ls`

c) `dir`

d) `list`

e) `cd`

Quiz: Question 3

- Which of the following Unix commands renames file “text1” into “homework1”?

a) `ren text1 homework1`

b) `mv text1 homework1`

c) `rm text1 homework1`

d) `rm homework1 text1`

e) `ren homework1 text1`

Quiz: Question 3

- Which of the following Unix commands renames file “text1” into “homework1”?

a) `ren text1 homework1`

 b) `mv text1 homework1`

c) `rm text1 homework1`


d) `rm homework1 text1`

e) `ren homework1 text1`

Quiz: Question 4

- What is C *not*?
 - a structured programming language
 - a compiled programming language
 - a high-level programming language
 - a portable programming language
 - a object-oriented programming language

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 -  e) a object-oriented programming language

Quiz: Question 5

- What is the meaning of the following code fragment?


```
/* printf("C programming is great!\n") */
```

- a) it prints "C programming is boring!"
- b) it is the main function of the C program
- c) it is a comment ignored by the compiler
- d) it prints "C programming is great!"
- e) it is a syntax error because a semicolon is missing after the `printf()` statement

Quiz: Question 5

- What is the meaning of the following code fragment?

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/* printf("C programming is great!\n") */
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- b) it is the main function of the C program
-  c) it is a comment ignored by the compiler
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- e) it is a syntax error because a semicolon is missing after the `printf()` statement

Quiz: Question 6

- What is *not* true about of the following compiler call?


```
% gcc -Wall -ansi HelloWorld.c -o HelloWorld
```

- a) the GNU C Compiler is called to generate an executable program called `HelloWorld`
- b) the compiler will print warning and/or error messages about any non-ANSI compliance in the code
- c) the compiler will read the file `HelloWorld.c`
- d) the compiler will ignore all warnings
- e) the compiler will assume that `HelloWorld.c` is an ANSI-compliant C program

Quiz: Question 6

- What is *not* true about of the following compiler call?

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Quiz: Question 7

- Which of the following constructs is a valid arithmetic operator in C?
(Check all that apply!)

- a) *
- b) .
- c) #
- d) >>
- e) -

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Quiz: Question 8

- What is the value of an integer x after the following statement?

```
x = 8 / 2 + 10 % 3;
```

- a) 0
- b) 42
- c) -2
- d) 5
- e) 2

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Quiz: Question 8

- What is the value of an integer x after the following statement?

```
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```

- a) 0
- b) 42
- c) -2
-  d) 5
- e) 2

Quiz: Question 9

- What is the value of an integer x after the following statement?


```
x = (10 - (3 - (20 - -10)));
```

- a) -7
- b) 17
- c) 27
- d) 37
- e) 77

Quiz: Question 9

- What is the value of an integer x after the following statement?

```
x = (10 - (3 - (20 - -10)));
```

- a) -7
- b) 17
- c) 27
-  d) 37
- e) 77

Quiz: Question 10

- What is the value of an integer x after the following statement?


```
x = 2 << 10 >> 2;
```

- a) 256
- b) **Syntax Error!**
- c) 2102
- d) 512
- e) 20000000

Quiz: Question 10

- What is the value of an integer `x` after the following statement?

```
x = 2 << 10 >> 2;
```

- a) 256
- b) Syntax Error!
- c) 2102
-  d) 512
- e) 200000000


Quiz: Question 11

- Which of the following format strings will print a `long int` value in decimal format when used with `printf()`?

- a) `"%d"`
- b) `'%ld'`
- c) `"%ld"`
- d) `'%li'`
- e) `"%lu"`

Quiz: Question 11

- Which of the following format strings will print a `long int` value in decimal format when used with `printf()`?

- a) `"%d"`
- b) `'%ld'`
-  c) `"%ld"`
- d) `'%li'`
- e) `"%lu"`

Quiz: Question 12

- Which of the following constructs are valid type names in C? (Check all that apply!)

- a) `char int`
- b) `unsigned char`
- c) `short integer`
- d) `unsigned long long int`
- e) `long double`

Quiz: Question 12

- Which of the following constructs are valid type names in C? (Check all that apply!)

a) `char int`

b) `unsigned char`

c) `short integer`

d) `unsigned long long int`

e) `long double`

Quiz: Question 13

- Assume `Int` is a variable of type `int` and `Double` is a variable of type `double`. Which statement is true for the following assignment? (Check all that apply!)

```
Int = (int)Double;
```

a) The assignment is invalid: syntax error!

b) The parentheses should go around `Double`.

c) The parentheses should go around `Int`.

d) The value in `Double` is converted to an integer value and then assigned to `Int`.

e) Any fractional part in `Double` is truncated off.

Quiz: Question 13

- Assume `Int` is a variable of type `int` and `Double` is a variable of type `double`. Which statement is true for the following assignment? (Check all that apply!)

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- c) The parentheses should go around `Int`.
- d) The value in `Double` is converted to an integer value and then assigned to `Int`.
- e) Any fractional part in `Double` is truncated off.

Quiz: Question 14


- Which of the following expressions correctly computes the polynomial $p = 2x^2 - 3x + 5$? (Check all that apply!)


- a) $p = 2x^2 - 3x + 5;$
- b) $p = x*2*x + 5.0 - 3*x;$
- c) $p = (2*x - 3)*x + 2 + 3;$
- d) $p = 2/x - 5 * (3*x);$
- e) $p = 2*(x*x + 3)*x + 5;$

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d) $p = 2/x - 5 * (3*x);$

e) $p = 2*(x*x + 3)*x + 5;$

Quiz: Question 15

- Which of the following names are valid keywords in C? (Check all that apply!)

a) `if`

b) `when`

c) `integer`

d) `short`

e) `return`

Quiz: Question 15

- Which of the following names are valid keywords in C? (Check all that apply!)

- a) `if`
- b) `when`
- c) `integer`
- d) `short`
- e) `return`

Quiz: Question 16

- Which of the following names are valid identifiers in C? (Check all that apply!)

- a) `I1`
- b) `i1`
- c) `if`
- d) `2x`
- e) `x2`

Quiz: Question 16

- Which of the following names are valid identifiers in C? (Check all that apply!)

- a) `l1`
- b) `i1`
- c) `if`
- d) `2x`
- e) `x2`

Quiz: Question 17

- What is the result of the evaluation of the following expression?


```
5 == 6 || 4 < 8 && 3 > -1
```

- a) `true`
- b) `false`
- c) `1`
- d) `0`
- e) `-1`

Quiz: Question 17

- What is the result of the evaluation of the following expression?

```
5 == 6 || 4 < 8 && 3 > -1
```

- a) true
- b) false
-  c) 1
- d) 0
- e) -1

Quiz: Question 18

- What is the result of the evaluation of the following expression?


```
33 < 33 ? 33 : 3 + 3
```

- a) 33
- b) -33
- c) 1
- d) 0
- e) 6

Quiz: Question 18

- What is the result of the evaluation of the following expression?

```
33 < 33 ? 33 : 3 + 3
```

- a) 33
- b) -33
- c) 1
- d) 0
-  e) 6

Quiz: Question 19

- If integer $x = 1$ at the beginning, what is the value of x after the following statement?


```
x += x + 1;
```

- a) 1
- b) 2
- c) 3
- d) 4
- e) 5

Quiz: Question 19

- If integer $x = 1$ at the beginning, what is the value of x after the following statement?

```
x += x + 1;
```

- a) 1
- b) 2
-  c) 3
- d) 4
- e) 5

Quiz: Question 20


- Given the following program fragment, what is printed when it gets executed?

```
int i = 0;
int s = 0;
while (1)
{
    i++;
    if (i > 10)
        { break; }
    if (i % 2 == 1)
        { continue; }
    s += i;
}
printf("%d", s);
```

- a) nothing
- b) 2
- c) 20
- d) 30
- e) **syntax error**

Quiz: Question 20

- Given the following program fragment, what is printed when it gets executed?

- a) nothing
- b) 2
- c) 20
-  d) 30
- e) syntax error

```
int i = 0;
int s = 0;
while (1)
{
    i++;
    if (i > 10)
    {
        break;
    }
    if (i % 2 == 1)
    {
        continue;
    }
    s += i;
}
printf("%d", s);
```