

Name: _____

Homework 4

1. What syntax follows the case statement?

- A. :
- B. ;
- C. -
- D. A newline

2. What keyword is required to avoid falling through from one case to the next?

- A. end;
- B. break;
- C. stop;
- D. quit;

3. What keyword covers unhandled case possibilities?

- A. all
- B. contingency
- C. default
- D. other

4. What is the result of the following code?

```
int x = 1;
switch(x)
{
    case 1: printf( "Help" );
    case 0: printf( "Me" );
            break;
    case 2: printf( "Hello World" );
}
```

- A. HelpMe
- B. Help
- C. Help Me
- D. Hello World

5. What is the final value of x after the code statements below are run?

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

- A. 10
- B. 9
- C. 0
- D. 1

6. When will the code block below execute?

```
while(x<100)
{code block}
```

- A. When x is less than one hundred
- B. When x is greater than one hundred
- C. When x is equal to one hundred
- D. Always

7. Which is not a loop structure?

- A. for
- B. do-while
- C. while
- D. repeat-until

8. How many times is a do-while loop guaranteed to loop?
- A. 0
 - B. Infinitely
 - C. 1
 - D. Variable
9. Can case conditions use test conditions?
- A. yes
 - B. no
10. What is wrong with this case statement -> case (x > 2):
- A. cases can't have a test condition
 - B. cases must be capitalized
 - C. cases must use a ; and not a :
11. What is wrong with this case statement -> case 2:
- A. cases must be capitalized
 - B. cases must use a ; and not a :
 - C. nothing
12. True or false, cases must use curly braces like other test condition statements
- A. true
 - B. false
13. Which loop structure always uses a semicolon after the test condition?
- A. for
 - B. do-while
 - C. while
14. Which for loop syntax is correct?
- A. for {i=0, i<10, i++}
 {code block}
 - B. for (i=0; i<10; i++);
 {code block}
 - C. for (i=0; i<10; i++)
 {code block}
15. Which for loop will not execute?
- A. for (i=0; i<5; i++)
 - B. for (i=5; i<=10; i++)
 - C. for (i=5; i==10; i++)
16. Does every loop structure require curly braces?
- A. yes
 - B. no
17. Which do-while loop structure is correct?
- A. do
 {
 code block
 } while (condition);
 - B. do
 {
 code block
 } while (condition)
 - C. do
 {
 code block
 } while (condition):

18 Analyze the code snippet below and write the statement(s) that are printed on the screen after a 'B' is inputted.

```
char selection;
printf("Enter A, B, or C \n");
scanf("%c",&selection);
switch(selection)
{
    case 'A' : printf("Rt = R1 + R2\n");
    case 'B' : printf("It = Vt / Rt\n");
    case 'C' : printf("Pt = Vt * It\n");
    default  : printf("That was not a correct selection!");
}
```

19 Analyze the two programs shown below and determine if both programs can be made to perform the same function of counting from 1 through 5. If so, what needs to be changed in each program? If not, why can't they be made to work the same?

```
void main(void)
{
    int count;
    for(count = 1; count <= 5; count = count + 1);
    printf("Count = %d \n", count);
}
```

```
void main(void)
{
    int count = 1;
    while(count <= 5)
    {
        printf("Count = %d\n", count);
        ++count;
    }
}
```

20 Convert the following "if ... else if ... else" code snippet into a switch/case code snippet.

```
void main(void)
{
    char selection;
    printf("Use OHM's Law to solve for A = Voltage, B = Current, C = Resistance\n ");
    printf("Enter your selection (A, B, or C) => ");
    scanf("%c",&selection);
    if(selection == 'A')
        printf("V = I * R");
    else if(selection == 'B')
        printf("I = V / R");
    else if(selection == 'C')
        printf("R = V / I");
    else
        printf("That was not a proper selection.");
}
```

[illegible]