Practice Midterm Exam

Allowed Attempts Unlimited

Instructions

Please answer the following questions.

Take the Quiz Again

Attempt History

	Attempt	Time	Score
KEPT	Attempt 2	16 minutes	56 out of 100 *
LATEST	Attempt 2	16 minutes	56 out of 100 *
	Attempt 1	80 minutes	49 out of 100 *

^{*} Some questions not yet graded

Score for this attempt: 56 out of 100 *

Submitted Oct 10 at 9:01pm This attempt took 16 minutes.

Question 1	1 / 1 pts
An SD card is	
secondary memory	
O primary memory	
O volatile memory	
a processor	
	secondary memoryprimary memoryvolatile memory

	Question 2	1 / 1 pts
	RAM is	
	nonvolatile memory	
	onone of these	
Correct!	ovolatile memory	
	 secondary memory 	

Question 3 A double Correct! Can be divided by zero cannot store values with a fractional part is less accurate than a float none of these

	Question 4	1 / 1 pts
	The char 'A'	
	is the value 63 in the ASCII table	
Correct!	is the value 65 in the ASCII table	
	is the value 64 in the ASCII table	

	Question 5	1 / 1 pt
	A nanosecond is (the x^y means x to the y power)	
t! 	10^-30 seconds	
	○ 10^-20 seconds	
	○ 10^-40 seconds	
	○ 10^-10 seconds	

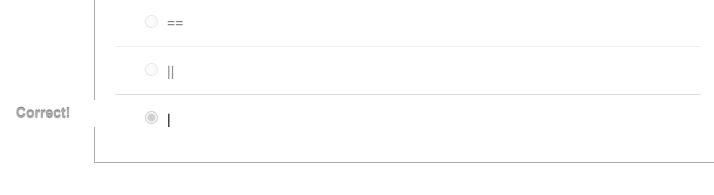
o is the value 97 in the ASCII table

	Question 6	1 / 1 pts
	The code: #define ADD(a,b) a+b	
	is a syntax error	
	odefines a constant	
	onone of these	
Correct!	defines a macro	

Question 7

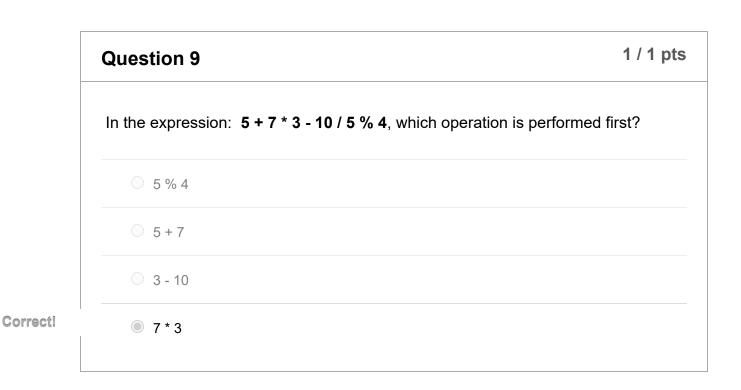
Which operator is a non-short-circuiting logical?

<=



0 / 1 pts **Question 8** Which choice has operators in order of precedence from highest to lowest? ++ % - || <= +=</pre> += || <= - % ++ Correct Answer ++ % - <= || += += <= || - % ++

You Answered



1 / 1 pts **Question 10**

	Which library contains useful math functions?
	○ math.c
Correct!	none of these
	○ float.c
	○ stdio.c

	Question 11	1 / 1 pts
	In the following code, x is int func(int x, int y){ }	
Correct!	a parameter	
	an output argument	
	onone of these	
	an actual argument	

Question 12	1 / 1 pts
What data types can be returned from a function?	
○ char	
Odouble	

	○ int
Correct!	all of these

Question 13	1 / 1 pts
The following code	
<pre>if(-1) printf("Yes"); else printf("No");</pre>	
none of these	
O prints No	
prints Yes	
has a syntax error	

	Question 14	0 / 1 pts
	Selection statements are for	
	onone of these	
ou Answered	iteration	
	data	
orrect Answei	branching	

Question 15	1 pts				
Which loop is typically used when you know the number of iterations before the loop body is executed?					
while					
nested					
O do-while					
for					
	Which loop is typically used when you know the number of iterations before the loop body is executed? while nested do-while				

	Question 16	1 / 1 pts
	Removing all breaks from a switch-case with a default will result in	
Correct!	only default is executed	
	only one case being executed	
	all cases and default being executed	
	all cases being executed	

Question 17	1 / 1 pts
The loop for(i=0; ; i++)	
has a syntax error	
onone of these	

- is okay if the loop body has a break
- is always an infinite loop

The loop below is while(i < x){ printf("i", i++); printf("i", i--); } will execute the loop body zero times will execute the loop body 2x times will execute the loop body x times infinite

Correct!

Question 19 1 / 1 pts

```
The code below is
```

```
int n = 3;
if(windy == 1)
    n--;
if(cold == 1)
    n--;
if(rain == 1)
    n--;
```

```
if(n == 3)
    printf("Yup");
else
    printf("Nope");

flag controlled

    none of these

    sentinel controlled

    index controlled
```

Correct!

Correct!

Question 20 Curley braces are always required for loops and selection statements. True False

```
What value is printed

func(5, 6, 3);

if func is defined as follows?

void func(int a, int b, int c) {
 printf("%d", (a + b * b / c));
}
```

```
Question 22 0 / 2 pts
```

```
What is printed by the following code?
int main(){
   int a=1, b=2;
   func(a, b, a, b);
}

void func(int a, int b, int c, int d){
   a += c + b * d;
   printf("%d %d %d %d", a, b);
   return;
}
```

You Answered

6 2 2 6422048

Correct Answers

6

```
Question 23 4 / 4 pts
```

```
What is printed by the following code?
```

```
int main(){
    int a=3, b=4;
    func(b, a);
}

void func(int a, int b){
    if(a%2 == 0 && b%2 == 0)
        printf("True");
    else
        printf("False");
```

```
return;
}

True

False
```

Correct!

```
4 / 4 pts
Question 24
What is printed by the following code?
int main(){
  int a=4, b=3;
  func(a, b);
}
void func(int a, int b){
  if(a\%2 == 0 || b\%2 == 0)
    printf("True");
  else
    printf("False");
  return;
}
    True
    False
```

```
Question 25

What is printed by the following code?

int main(){
 int a=4, b=5;
```

```
func(a, b);
                }
                void func(int a, int b){
                   if(a > b || a\%b == 0 \&\& a\%2 == 0)
                      printf("One");
                   else if(a > b \parallel a\%b != 0 \&\& a\%2 == 0)
                      printf("Two");
                   else if(a < b || a\%b != 0 \&\& a\%2 == 0)
                      printf("Three");
                   else
                      printf("Zero");
                   return;
                }
                      Two
Correct Answers
                     Two
```

```
4 / 4 pts
Question 26
What is printed by the following code?
int main(){
  int a=4;
  func(a, b, c, d);
}
void func(int a){
  switch(a){
     case 1:
       printf("Red ");
       break;
     case 2:
       printf("Green ");
       break;
     case 3:
       printf("Blue ");
       break;
     case 4:
```

```
printf("Cyan ");
                    default:
                       printf("None");
                  }
                  return;
               }
                     Cyan None
Correct Answers
                   Cyan None
```

Correct!

```
4 / 4 pts
                Question 27
                What value is returned from the following function to b if the function call is:
                int main(){
                  int a=5;
                  int b = func(a);
                }
                int func(int a){
                  int x = -12; int y = 3;
                  for(int i=a; i<8; i+=y){
                     x += i + y;
                  }
                  return x;
                }
                      -4
Correct Answers
                    -4
```

4 / 4 pts **Question 28**

```
What is printed by this loop?
                      for (int i = 12; i < 18; i += 2)
                           printf("%d ", i);
                     12 14 16
Correct Answers
                    12 14 16
                                                                                          6 / 6 pts
               Question 29
```

Correct!

Correct Answers

103033

What is printed by ths loop? for (i = 1; i < 4; i+=2)for $(j = 0; j \le i; j = 3)$ printf("%d %d ", i, j); 103033

```
6 / 6 pts
Question 30
What is printed by the following?
  for(int i=1; i<3; i++)
     for(int j=1; j<3; j++) {
       if(i\%2 == 0 \&\& j\%2 == 1)
          printf("E%dO%d ", i, j);
       else
          printf("Nope ");
     }
```

Nope Nope E2O1 Nope

Correct Answers

Nope Nope E2O1 Nope

Question 31

Not yet graded / 10 pts

Write an empty main function.

Write a function called avg_eq() that accepts 4 doubles, a, b, c, and d and returns a 1 if the average of a, b and c is greater d, zero otherwise.

Write code in main that tests your function with these data:

```
(1,3,5,2)

(2,3,4,4)

(10,50,25,30)

(123,987,42, 300)

Output

(1,3,5,2) -> 1

(2,3,4,4) -> 0

(10,50,25,30) -> 0

(123,987,42,300) -> 1
```

}

Copy your code and paste it below.

```
Your Answer:
#include <stdio.h>

double avg_eq(double a, double b, double c, double d, double result);
int main() {

double a, b, c, d;
double result;

printf("Pick 1 numbers: ");
scanf("%If %If %If", &a, &b, &c, &d);

printf("%.0If", avg_eq(a, b, c, d, result));
return 0;
```

Question 32

Write an empty main function.

Write a function called calc_15_even() that accepts an integer n and calculates the sum of the first n integers that are divisible by 15 and even, which is returned and printed to screen in main.

Add code to your main function to test your code for n = 200 and print the sum returned.

Copy tour code and paste it below.

```
Your Answer:
```

```
#include <stdio.h>
int calc_15_even(int i, int n, int sum);
int main() {
int i, n;
int sum;
printf("pick an term: ");
scanf("%d", &n);
printf("%d", calc_15_even(i,n,sum));
return 0;
}
int calc 15 even(int i, int n, int sum) {
for (i=0; i<n; i++) {
if(i%15 && (i%2 == 0)) {
sum += i;
return sum;
```

Write an empty main function.

Write a function called pairs() that accepts integers m and n and prints all pairs from i = 0 to m and j = 0 to n, where i greater than or equal to j. Test your code with arguments m = 4 and n = 3.

Hint: Write a nested loop to print all pairs (test it) add code to print the selected pairs i greater than or equal to j (test again).

Add code to your main function to test your code.

Output

0 0

10

11

2 0

2 1

2 2

3 0

3 1

3 2

4 0

4 1

4 2

Copy and paste your code below.

Your Answer:

```
int pairs() {
int m, n;

printf("What is m?: ");
scanf("%d", &m);

printf("What is n?: ");
scanf("%d", &n);

for (int i=0; i <= m; i++) {
  for (int k = 0; k < n; k++) {
    if(i >= k) {
      printf("%d %d\n", i, k);
    }
}
```

}		
}		

Quiz Score: 56 out of 100