StandardIO Quiz

Due Sep 24 at 11:59pm **Points** 35 **Questions** 25 **Time Limit** 300 Minutes

Instructions

Take time to understand the code. If in doubt, cut and paste the code in a file, compile and see what is printed. Then understand what happened.

// compile with -Wall -Wextra -pedantic

// this will not hide any warnings and forces gcc not use any of its own standards and stick with the C standard.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	47 minutes	31 out of 35

Correct answers are hidden.

Score for this quiz: **31** out of 35
Submitted Sep 22 at 5:54pm
This attempt took 47 minutes.

Question 1

2 / 2 pts

What is the value of ch printed in this program when user enters

23 34<enter>

Pay attention to %d in the printf statement.

```
#include <stdio.h>
int main ( )
{
  int x;
  char ch;
  int y;
```

```
  scanf ( "%d%c%d", &x, &ch, &y);
  printf ("The value of ch is %d \n", ch);
}
```

- 32
- space
- 23
- 10

Question 2

2 / 2 pts

// What is the value of x and y when user enters

20345<enters>

```
#include <stdio.h>
int main ( )
{
int x=20;
int y =30;
scanf ( "%3d%2d", &x, &y);
printf ("The value of x is %d\n", x);
printf ("The value of y is %d\n", y);
}
//
```

- x = 20 , y = 345
- x=2 y = 345
- x = 20, y=3
- x = 203, y=45

Question 3

2 / 2 pts

// What is the value of x and y printed when user enters

223 3456<enter>

```
#include <stdio.h>

int main ( )
{

int x=20;
int y =30;

scanf ( "%*d %2d", &y);

printf ("The value of x is %d\n", x);
printf ("The value of y is %d\n", y);

}
```

- x=20, y=22
- x=20, y =34
- x=22, y=3456
- x=22, y = 34

Incorrect

Question 4

0 / 2 pts

// what is the problem with this program. gcc gives compilation warnings.

// compile with -Wall

// this will not hide any warnings.

```
int main ( )
{
   int x = 20;
   int y ;
#include  <stdio.h>


  scanf ( "%d", y) ;


}
```

- There is no printf statement
- There is no ampersand for the y in scanf
- variable x is not initialized
- include statement should be the first line

Question 5

2 / 2 pts

What is the value of ch printed in this program when user enters

23<enter>

34<enter>

Pay attention to %d in the printf statement.

```
#include <stdio.h>
int main ( )
{
  int x;
  char ch;
  int y;
  scanf ( "%d%c%d", &x, &ch, &y);
  printf ("The value of ch is %d \n", ch);
}
// you should ask why it prints this value and understand.
// HINT: ASCII table
```

- 9
- 10
- 11
- 12

Question 6

2 / 2 pts

What is the value numRead ?

```
#include <stdio.h>

int main ( )
{

int x;

int y;

int numRead = scanf ( "%d%d", &x, &y);

printf ("The number of items read is %d \n ", numRead );

}

// When user enters

5000 Rocklin Blvd 300<enter>
```

- 0
- 1
- 2
- 3

Question 7

2 / 2 pts

```
#include <stdio.h>

int main ( )
{

int x;
char ch;
int y;

int numRead = scanf ( "%d%c%d", &x, &ch, &y);

printf ("The number of items read is %d\n", numRead );

}


// What is the value of numRead if user enters

3000 4000<enter>
```

- 0
- 1
- 2
- 3 (selected)

Question 8

2 / 2 pts

```
#include <stdio.h>

int main ( )
{

char ch1, ch2, ch3;

int numRead = scanf ( "%c%c%c", &ch1, &ch2, &ch3);

printf ("The number of items read is %d\n", numRead );

}

// what is the number of items read printed  if user enters

AB<enter>
```

- 3 (selected)
- 2
- 1
- 0

Question 9

2 / 2 pts

```
#include <stdio.h>

int main ( )
{

  char ch1, ch2, ch3;

  ch1 = getchar ( ) ;
  scanf("%c", &ch2);

  printf ( "%c %c \n", ch1, ch2);

}
```

values in ch1 and ch2 would be same if user enters

AA<enter>

- True
- False

Question 10

2 / 2 pts

```
#include <stdio.h>

int main ( )
{

char ch1, ch2, ch3;

int ch;

ch1 = getchar ( ) ;
ch3= getchar ( ) ;
ch2 = getchar ( ) ;

printf ( "%c %c \n", ch1, ch2);

}
```

would the values in ch1 and ch2 be same if user enters

A<enter>

A<enter>

- True
- False

Question 11

1 / 1 pts

```
float value;

value = 789.34 ; // is same as
```

value = 78934e-2 ;

- True
- False

Question 12

1 / 1 pts

789.23e2 is same as 78923

- True
- False

Question 13

1 / 1 pts

putchar ('E') can be written as

putchar (69) ;

- True
- False

Question 14

1 / 1 pts

int x ;

scanf ("%d", x) ;

will result in compilation warning in some systems or run time error because the address of x is not given.

- True

- False

Question 15

1 / 1 pts

int x = 5;

scanf ("%*d %d", &x) ;

if user enters

10 30<enter>

what would be the value of x after scanf successfully reads the values.

- 5
- 30
- 10
- none of the above

Question 16

1 / 1 pts

int i = 5;
scanf ("%*c %d " , &i);
If user enters
10 30<enters>
What would be the value of i after scanf successfully reads the values

- 0
- 5
- 10
- 30

Question 17

1 / 1 pts

```
#include <stdio.h>
int main ( )
{
int x;
      scanf( "%d",x);
}
```

what is wrong with this program ?

Your Answer:

No amperand sign aka a pointer, to store the value into a memory address.

Question 18

0 / 1 pts

```
#include <stdio.h>
int main
{
int x;
char ch;
int y;
}
```

what is wrong with the program ?

Your Answer:

No error. No assignment of the variable, but initialized is fine. Will compile perfectly fine just doesn't have no output.

Question 19

1 / 1 pts

```
#include <stdio.h>
int main ( )
{
int x;
char ch;
int y;
scanf( "d", &x);
}
```

what is wrong with this program ?

Your Answer:

No format specifier provided for our data type aka percent sign (%) , so will give compilation errors /warnings. Should have %d instead of d.

Question 20

1 / 1 pts

```
#include <stdio.h>
int main ( )
{
int x;
char ch;
int y;
scanf( %d  ,x);
}
```

what is wrong with this program ?

Your Answer:

No pointer / amperand sign provided to assign our variable x. Also no quotes provided around our format specifier so compiler would return 2 errors one for quotes and 1 for storing the variable without a pointer. scanf("%d", &x) would be the appropriate call to this function.

Question 21

0 / 1 pts

```
#include <stdio.h>
int main ( )
{
int x;
   char ch;
  int y;
  scanf( "%d",x) :
}
```

what is wrong with this program ?

Your Answer:

No pointer specified to assign our variable x. Would result in a compilation error / warning as we need to specify a pointer to store the value in memory. Need memory address to store.

Question 22

1 / 1 pts

The ASCII value of letter 'A' is :

- 65
- 66
- 67
- 64

Question 23

1 / 1 pts

The ASCII value of letter 'a' is :

- 97
- 87
- 77
- 98

Question 24

1 / 1 pts

char ch = getchar ( ) ;

If user enters

ABCD<enter>

what would be the value of ch

- A
- B
- C
- D

Question 25

1 / 1 pts

If user enters

ABCD<enter>

char ch = getchar ( ) ;

ch = getchar ( ) ;

what would be the value of ch after the code executes

- (●) B
- ( ) A
- ( ) C
- ( ) D

Quiz Score: **31** out of 35

Quiz on Linux commands

Due Sep 10 at 11:59pm **Points** 21 **Questions** 21 **Time Limit** 300 Minutes

Instructions

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	10 minutes	21 out of 21

Correct answers are hidden.

Score for this quiz: **21** out of 21
Submitted Sep 9 at 11:15pm
This attempt took 10 minutes.

Question 1

1 / 1 pts

cd ..

The above command is changing the working directory to

- root folder
- parent folder
- child folder
- home folder

Question 2

1 / 1 pts

ls -l

The above command does what ?

- print all files starting with letter l

- [x] print all files in long listing
- [ ] print working directory
- [ ] print all files minus link files

Question 3

1 / 1 pts

cal

print what ?

- [ ] calendar of every month
- [x] calendar of the current month
- [ ] all California campus
- [ ] calculator

Question 4

1 / 1 pts

The symbols

. and ..

represent

- [ ] parent and grand parent
- [x] current folder and parent folder
- [ ] parent and child
- [ ] grand parent and parent

Question 5

1 / 1 pts

What is the linux command to change your password

- [x] passwd

- chgpass
- ps
- pwd

Question 6

1 / 1 pts

This command is used to copy a file

- docopy
- copy
- cpy
- cp

Question 7

1 / 1 pts

This command will print the working directory

- dwd
- pwd
- print mydir
- ps

Question 8

1 / 1 pts

You rename a file using this command :

- rm

- ren
- mv
- cp

Question 9

1 / 1 pts

This command modifies the modified timestamp of a file. If the file is not existing, it will create a filename.

- mv
- touch
- ls
- cp

Question 10

1 / 1 pts

This command is used to change permissions on a file

- chgrp
- pwd
- chsh
- chmod

Question 11

1 / 1 pts

This command is used to create a folder

- rmdir
- touch

- passwd
- mkdir

Question 12

1 / 1 pts

This command is used to remove the folder (if empty)

- mv
- cp
- rmdir
- mkdir

Question 13

1 / 1 pts

cd ..

The above command will change the working directory to :

- parent folder
- child folder
- current folder
- home folder

Question 14

1 / 1 pts

This command

rm -rf

will do what ?

- renames all files to random

- remove files in current folder
- removes all files recursively and forcefully
- removes files in the entire system

Question 15

1 / 1 pts

The symbol for the root folder is _____

- |
- /
- ~
- ..

Question 16

1 / 1 pts

pwd prints the _____ path

- relative
- parent
- absolute
- child

Question 17

1 / 1 pts

env prints

- environment variables
- global variables
- local variables

- system variables

Question 18

1 / 1 pts

This symbol / represents

- root folder
- home directory
- binary folder
- parent folder

Question 19

1 / 1 pts

when we have this :

drwx------ 2 srivatss othcsc 4096 Sep 7 2017 print

What is the letter d stands for in drwx

- destination
- deleted
- to be deleted
- directory

Question 20

1 / 1 pts

drwx------ 2 srivatss othcsc 4096 Sep 7 2017 print

what is srivatss

- owner of the admin

- loginID
- owner of the system
- folder name

Question 21

1 / 1 pts

-rw------- 1 srivatss othcsc   37 Mar 4 2020 2019.txt

what is 37 ?

- size of the file
- number of days untouched
- number of days since rebooted
- age of the file

Quiz Score: **21** out of 21

Quiz on Control Structures

Due Sep 29 at 11:59pm **Points** 35 **Questions** 35 **Time Limit** 300 Minutes

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	41 minutes	35 out of 35

ⓘ Correct answers are hidden.

Score for this quiz: **35** out of 35
Submitted Sep 29 at 11:11pm
This attempt took 41 minutes.

Question 1

1 / 1 pts

What is printed ?

```
int x = 20 , y = 35 , z = 0;

if ( ( x == 30 ) && ( y = 40 ) )
    z = 10;

printf ( "%d \n", z ) ;
```

- ○ 10
- ○ nothing
- ○ 35
- ◉ 0

Question 2

1 / 1 pts

What is printed ?

```
int x = 20 , y = 35 , z = 0;

if ( ( x == 30 ) || ( y = 40 ) )
    z = 10;

printf ( "%d \n", z ) ;
```

- (•) 10
- ( ) 0
- ( ) 40
- ( ) 30

Question 3

1 / 1 pts

What is printed ?

```
int x = 20 , y = 35 , z = 0;

if ( ( x == 30 ) || ( y = 0 ) )
    z = 10;

printf ( "%d \n", z ) ;
```

- (•) 0
- ( ) 10
- ( ) 20
- ( ) 15

Question 4

1 / 1 pts

```
int x = 0 , y = 10;
```

```
while ( x ) {
   y++ ;
}
printf ( "%d \n", y) ;
```

- 10
- 0
- 11
- 12

Question 5

1 / 1 pts

```
int x = 1 , y = 10;
while ( x < 10 ) {
   y++ ;
   x = x + 2 ;
}
printf ( "%d \n", y) ;
```

- 14
- 15
- 16
- 17

Question 6

1 / 1 pts

What is wrong with this program ?

```
int x = 20, y = 10 ;
  switch ( x )  {
     case x :
```

```
        printf ( "%d \n", x ) ;
        break;

    case y:
          printf ( "%d \n", y);
    break;
     // default :
     //   break;

}
```

- default statement is commented. It should be uncommented.
- you can't have expressions in case statements (marked red)
- You need more case statements.
- There is no problem with this program

Question 7

1 / 1 pts

What is wrong with this program ? if there is no problem, what is printed ?

```
int x = 11, y = 20 ;

if ( x < 10 )
   printf ( " %d \n", x) ;
 else ( x > 10 )
   printf ( "%d \n", y );
```

- 20
- compilation error, if is missing after else
- 10
- Not in syllabus

Question 8

1 / 1 pts

```
int x = 0, y = 21 ;
 for (  ; x < 10 ; x++  )
    ;
printf ( "%d \n", y);
```

what is printed value of y ?

- (●) 21
- ( ) x is not initialized in the for loop
- ( ) for loop should have statements

Question 9

1 / 1 pts

```
int x  = 10, y = 15;
for ( x = 10 ; x < 20 ; x++ )
  {
    int y = 20;
    break;
  }


printf ( "%d \n", y);
```

what is the printed value of y

- (●) 15
- ( ) 20

- compilation error
- 25

Question 10

1 / 1 pts

What is the output of the following code segment?

```
int x = 5;
if (x = 2)
    printf( "This is true!");
else
   printf( "This is False! ");
   printf( "Good Bye! ");
```

- This is true!
- This is False!
- This is true!Good Bye!
- This is False!Good Bye!

Question 11

1 / 1 pts

Which of the following expressions results in false value

A. true && false

B. true && true

C. true || true

D. false || true

- A
- B
- C

D

Question 12

1 / 1 pts

How many times will the following loop display "Hello"?

```
int i =0;
  for (i = 0; i < 20; i++)
     printf ( "Hello! \n" );
```

- 19
- 20
- 21
- 22

Question 13

1 / 1 pts

How many times will the following loop display "Hello"?

```
int i = 0;
  for (i = 0; i <= 10; i+=2)
     printf (  "Hello!" );
```

- 4
- 5
- 6
- 7

Question 14

1 / 1 pts

True or False.

This code will compile.

```
int x = 10;
 switch  x
  {
     case 10 :
       printf ( "Yes"  );
      break ;
    }
```

- True
- False

Yes, there should be ( ) around x in the switch statement

Question 15

1 / 1 pts

```
char ch = 'A' ;
printf( "%d", ch ) ;
```

What is printed value of ch

- 65
- 66
- 97
- 98

Question 16

1 / 1 pts

```
#include <stdio.h>
main ( )
```

```
{
char ch = A ;
scanf ( "%d", ch ) ;
}
```

does the program compile or run successfully ? if Yes, what is printed. If no, what happens.

- 65
- 66
- 97
- compiler error

Question 17

1 / 1 pts

```
char ch = 'A';
ch  = ch + 4 ;
```

What is the value of ch ?

- 66
- 68
- 67
- 69

Question 18

1 / 1 pts

What is the value of x after this code finishes ?

```
int x = 20;
x += 10;
```

x=+10;

- 20
- 10
- 30
- 40

Question 19

1 / 1 pts

```
int x = 20;
x += 10 ;
 {
   int x = 10 ;
 }
printf ( "%d \n", x);
```

- 10
- 20
- 30
- 40

Question 20

1 / 1 pts

```
int i;
for ( i = 0 ; i < 10 ; i++ )
    if ( i < 5 )
      break;
```

What is the value i after break ;

- 0
- 1
- 2
- 5

Question 21

1 / 1 pts

```
#include <stdio.h>


int main(void) {
int x = 5;
if ( x = 0 )
    printf ( "Hello ");
else
   printf ( "bye ");
printf ( "%d\n", x);
return 0;
}
```

What is the value of x printed ?

- 0
- 5
- 1
- 2

Question 22

1 / 1 pts

```
#include <stdio.h>

int main(void) {
int x = 5;
if ( x = 10 )
    printf ( "Hello ");
else
    printf ( "bye ");
```

```
printf ( "%d\n", x);

return 0;
}
```

What is the value of x printed ?

- (•) 10
- ( ) 5
- ( ) 0
- ( ) 1

Question 23

1 / 1 pts

```
#include <stdio.h>

int main(void) {
int x = 5;
if ( x = 10 )
    printf ( "Hello ");
    printf ( "World");
else
  printf ( "bye ");
printf ( "%d\n", x);

return 0;
}
```

The above has compiler errors. True or False

- (•) True
- ( ) False

Question 24

1 / 1 pts

```
#include <stdio.h>

int main(void) {
int x = 5;
if ( x == 5 )
{
    int y = 20;
```

```
}

printf ( "y=%d\n", y);

return 0;
}
```

The above code has compiler problems. True or False

- True
- False

Question 25

1 / 1 pts

```
#include <stdio.h>
int y = 20;

int main(void) {
int x = 5;
if ( x == 5 )
{
    int y = 10;
}

printf ( "y=%d\n", y);

return 0;
}
```

The printed value of y is 20

- True
- False

Question 26

1 / 1 pts

```
#include <stdio.h>
int x = 20;

int main(void) {
int x = 5;
if ( x == 5 )
{
     int x = 10;
```

```
}

printf ( "x=%d\n", x);

return 0;
}
```

The printed value of x is 10

- True
- False

Question 27

1 / 1 pts

```
#include <stdio.h>
int x = 20;

int main(void) {
int x = 5;
while ( 1 == 1 )
{
    x++;
    break;
}

printf ( "x=%d\n", x);

return 0;
}
```

What is the value of x printed ?

- 6
- 20
- 5
- 1

Question 28

1 / 1 pts

```
#include <stdio.h>
int x = 20;
```

```
int main(void) {
int x = 5;
while ( 0 == 0 )
{
    x++;
    break;
}

printf ( "x=%d\n", x);

return 0;
}
```

What is the value of x printed ?

- 6
- 20
- 5
- 1

Question 29

1 / 1 pts

```
#include <stdio.h>
int x = 20;

int main(void) {
int x = 5;
while ( 1 == 0 )
{
    x++;
    break;
}

printf ( "x=%d\n", x);

return 0;
}
```

What is the value of x printed ?

- (●) 5
- ( ) 6
- ( ) 20
- ( ) 1

Question 30

1 / 1 pts

```
#include <stdio.h>
int x = 20;

int main(void) {
int x = 5;
for (   ;  1 == 0  ;    )
{
    x++;
    break;
}

printf ( "x=%d\n", x);

return 0;
}
```

What is the value of x printed ?

- (●) 5
- ( ) 20
- ( ) 6
- ( ) 1

Question 31

1 / 1 pts

```
#include <stdio.h>
int x = 20;

int main(void) {
int x = 5;
for (; 1 == 1 ; )
{
```

```
   x++;
  break;
}

printf ( "x=%d\n", x);

return 0;
}
```

What is the value of x printed ?

- (selected) 6
- 5
- 20
- 1

Question 32

1 / 1 pts

```
#include <stdio.h>
int x = 20;

int main(void) {
int x = 5;
do
{
    x++;
    break;
} while ( 1 == 1 );

printf ( "x=%d\n", x);

return 0;
}
```

What is the value of x printed ?

- (selected) 6
- 5
- 20
- 1

Question 33

1 / 1 pts

```
#include <stdio.h>
int x = 20;

int main(void) {
int x = 5;
do
{
   x++;
   break;
   x=40;
} while ( 1 == 1 );

printf ( "x=%d\n", x);

return 0;
}
```

The statement x = 40 will never be executed. True or False

- (●) True
- ( ) False

Question 34

1 / 1 pts

```
#include <stdio.h>
int x = 20;


int main(void) {
int x = 5;
do
{
   x++;
   continue ;
   x=40;
} while ( 1 == 1 );


printf ( "x=%d\n", x);


return 0;
}
```

The statement x = 40 will never be executed. True or False

- True
- False

Question 35

1 / 1 pts

```
#include <stdio.h>
int x = 20;

int main(void) {
int x = 5;
do
{
   x++;
   x=40;
} while ( 1 == 0 && 1 == 1 );

printf ( "x=%d\n", x);

return 0;
}
```

The value of x printed is 40. True or False

- True
- False

Quiz Score: **35** out of 35

Bitwise operators

Due Oct 2 at 11:59pm **Points** 21 **Questions** 21 **Time Limit** 300 Minutes

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	11 minutes	21 out of 21

Score for this quiz: **21** out of 21
Submitted Oct 2 at 7:57pm
This attempt took 11 minutes.

Question 1

1 / 1 pts

```
if ( 1 >> 1 )
  putchar ( 'T');
else
  putchar ( 'F');
```

- T
- F

Correct!

- TT
- FT

Question 2

1 / 1 pts

What is printed

```
unsigned char a = 0x23;
unsigned char b = 0x45 ;

printf ( "c=0x%x\n", a & b );
```

- c=0x23
- c=0x45

c=0x67

Correct! c=0x1

Question 3

1 / 1 pts

```
unsigned char a = 0x10;
unsigned char b = 0;
if ( ~b )
  putchar ( 'T');
else
  putchar ( 'F');
```

TT

FF

Correct! T

F

Question 4

1 / 1 pts

```
unsigned char a = 0x23;
unsigned char b = 0x45 ;

printf ( "c=0x%x\n", a | b );
```

What is printed ?

c=0x23

c=0x23

Correct! c=0x67

c=0x1

Question 5

1 / 1 pts

unsigned char x = 0x21, y ;
y = x & 0x1 ;

what is the value of y

Correct!

- (•) 1
- ( ) 2
- ( ) 0x21
- ( ) 33

Question 6

1 / 1 pts

unsigned char x = 0x20, y ;
y = x >> 4 ;
what is the value of y now ?

Correct!

- (•) 2
- ( ) 3
- ( ) 0xF
- ( ) 0XF0

Question 7

1 / 1 pts

unsigned char x = 0xF, y ;

x = x << 4 | 0xF ;
what is the value of x ?

Correct!

- (•) 255
- ( ) 256
- ( ) 254
- ( ) 257

Question 8

1 / 1 pts

unsigned char a = 0x10;
unsigned char b = 0x1;
if (a & b)
  putchar ('T');
else
  putchar ('F');
What is printed ?

Correct!

- (selected) F
- T
- FT
- TF

Question 9

1 / 1 pts

unsigned char x = 0x21, y ;
y = x | 0x10 ;
what is the value of y now ?

- 48

Correct!

- (selected) 49
- 0
- 1

Question 10

1 / 1 pts

unsigned char a = 0x10;
unsigned char b = 0;
if (a | b)
  putchar ('T');
else
  putchar ('F');
What is printed ?

F

Correct!

T

TT

TF

Question 11

1 / 1 pts

unsigned char x = 0x21, y ;
y = x >> 1 ;
what is the value of y now ?

Correct!

16

17

0x21

0x1

Question 12

1 / 1 pts

unsigned char x = 0x21, y ;
y = x >> 0 ;
what is the value of y now ?

Correct!

33

32

30

1

Question 13

1 / 1 pts

unsigned char x = 0x21, y ;
y = x & 0x10 ;

what is the value of y now ?

Correct!

- (•) 0
- ( ) 1
- ( ) 0x21
- ( ) 32

Question 14

1 / 1 pts

unsigned char a = 0x36 << 1;
printf ("%d", a);

- ( ) 36
- ( ) 0x36
- ( ) 54

Correct!

- (•) 108

Question 15

1 / 1 pts

unsigned char a = 0x36 >> 1;
printf ("%d", a);

Correct!

- (•) 27
- ( ) 28
- ( ) 30
- ( ) 36

Question 16

1 / 1 pts

unsigned char a = 0x10;
unsigned char b = 0x1;

```
if ( a & b )
  putchar ( 'T');
else
  putchar ( 'F');
```

What is printed ?

Correct!

- (•) F
- ( ) T
- ( ) FT
- ( ) TF

Question 17

1 / 1 pts

```
unsigned char a = 0x24 >> 2;
printf ( "%d", a);
```

what is printed ?

- ( ) 24
- ( ) 36
- ( ) 18

Correct!

- (•) 9

Question 18

1 / 1 pts

```
if ( 1 >> 1 )
  putchar ( 'T');
else
  putchar ( 'F');
```

- ( ) T

Correct!

- (•) F
- ( ) TT
- ( ) FT

Question 19

1 / 1 pts

```
unsigned char a = 0x10;
unsigned char b = 0;
if ( ~b )
  putchar ( 'T');
else
  putchar ( 'F');
```

- TT
- FF

Correct!

- T
- F

Question 20

1 / 1 pts

```
unsigned char a = 0x10;
unsigned char b = 0;
if ( a | b )
  putchar ( 'T');
else
  putchar ( 'F');
```

What is printed ?

- F

Correct!

- T
- TT
- TF

Question 21

1 / 1 pts

```
unsigned char a = 0x36 >> 1;
printf ( "%d", a);
```

Correct!

- (•) 27
- ( ) 28
- ( ) 30
- ( ) 36

Quiz Score: **21** out of 21

quiz on strings

Due Oct 29 at 11:59pm **Points** 20 **Questions** 20 **Time Limit** 300 Minutes

Instructions

you can look at the man pages to answer some of these

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	26 minutes	19 out of 20

Score for this quiz: **19** out of 20
Submitted Oct 29 at 7:10pm
This attempt took 26 minutes.

Question 1

1 / 1 pts

char name[12] = "Jack" ;

int data1[12] ;

short data2[12] ;

char data3[12];

char data4[3] ;

strcpy (_____, name) ;

which array is most suitable ?

- data2
- data1
- data3 — Correct!
- data4

Question 2

1 / 1 pts

```
char *strcpy(char *restrict dest, const char *src);
```

```
The strcpy() function copies the string pointed to by src,
________ the terminating null byte ('\0'), to the buffer
pointed to by dest.
```

- none of the above
- removing
- excluding

Correct!

- including

Question 3

1 / 1 pts

```
The ______ function calculates the length of the string pointed
       to by s, excluding the terminating null byte ('\0').
```

- stringlen( )
- stringlength( )
- length( )

Correct!

- strlen ( )

Question 4

1 / 1 pts

```
The strchr() and strrchr() functions return a pointer to the
       matched character or _____ if the character is not found.
```

Correct!

- NULL
- 1
- 2
- 0

Question 5

1 / 1 pts

```
The strcasestr() function is like strstr(), but ignores the case
       of both arguments
```

Correct!

- (•) True
- ( ) False

Question 6

1 / 1 pts

char name[12] = "Jack" ;

char data[12] ;

char *p;

strcpy (data, name) ; // 1

strcpy (name, data) ; //2

strcpy (name, p); // 3

strcpy (p, name) ; // 4

which strcpy is most suitable ?

- ( ) 2
- ( ) 4

Correct!

- (•) 1
- ( ) 3

Question 7

0 / 1 pts

char * ptr = "Hello World" ;

ptr = strchr (ptr, "w");
The ptr will have NULL value

Correct Answer

- True

You Answered

- False

Question 8

1 / 1 pts

```
char *strchr(const char *s, int c);
```

The **strchr**() function returns a pointer to the _____ occurrence
of the character *c* in the string *s*.

- first uppercase

Correct!

- first
- last
- first lowercase

Question 9

1 / 1 pts

```
char *strncpy(char *restrict dest, const char *restrict src, size_t n);
```

If the length of *src* is less than *n*, **strncpy**() writes additional
_____ bytes to *dest* to ensure that a total of *n* bytes are written

Correct!

- null
- 2
- 1
- 3

Question 10

1 / 1 pts

which header file to include to use string functions

- character.h
- Correct! string.h
- stringlib.h
- strings.h

Question 11

1 / 1 pts

char *ptr = "Hello" ;

char *p ;

strcpy (p, ptr) will copy ptr to p

- You Answered True
- Correct Answer False

Question 12

1 / 1 pts

```
size_t strlen(const char *s);
```

The **strlen**() function returns the number of _____ in the string pointed to by *s*

- digits
- lowercase letters
- uppercase letters
- Correct! bytes

Question 13

1 / 1 pts

what is the wrong with this code

```
char myName [ 5 ] = "Jill" ;
char copyName;
strcpy ( copyName, myName );
```

Correct!

- (selected) copyName should be an array at least as big as myName
- myName should at least be little bigger
- There is nothing wrong with the code
- the arguments of the function are incorrect

Question 14

1 / 1 pts

```
char *strstr(const char *haystack, const char *needle);
```

If *needle* is the empty string, the return value is _____
haystack itself.

Correct!

- (selected) always
- sometimes
- often
- never

Question 15

1 / 1 pts

printf ("%d", strcmp ("Walking", "walking"));
The above code will print 0

- True

Correct!

- False

Question 16

1 / 1 pts

char *ptr = "Hello" ;

char *p = "Hello" ;

strcmp (ptr, p) will return

Correct!

- 0
- 2
- -1
- 1

Question 17

1 / 1 pts

```
char *strstr(const char *haystack, const char *needle);

This function return a pointer to the _______ of the located
       substring, or NULL if the substring is not found.
```

- middle
- end
- none of the above

Correct!

- beginning

Question 18

1 / 1 pts

fill in the blank

The _____ function finds the first occurrence of the substring needle in the string haystack. The terminating null bytes ('\0') are not compared

Correct!

- (•) strstr ( )
- ( ) strcats ( )
- ( ) strcpy ( )
- ( ) strchr ( )

Question 19

1 / 1 pts

The **strrchr**() function returns a pointer to the last occurrence of the character *c* in the string *s*.

Correct!

- (•) True
- ( ) False

Question 20

1 / 1 pts

char *ptr = "Hello" ;

char *p = "hello" ;

strcmp (ptr, p) will return zero

- ( ) True

Correct!

- (•) False

Quiz Score: **19** out of 20

Structure quiz

Due Nov 12 at 11:59pm **Points** 15 **Questions** 14 **Time Limit** 180 Minutes

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	5 minutes	15 out of 15

Score for this quiz: **15** out of 15
Submitted Nov 10 at 5:01pm
This attempt took 5 minutes.

Question 1

1 / 1 pts

struct {

int x ;

} Number ;

is a valid definition of a a structure.

Correct!

- (•) True
- ( ) False

Question 2

1 / 1 pts

struct _person {

char name [2];

} Person ;

Which is a tag name

Correct!

- (selected) _person
- Person
- struct _person
- There is no tag name defined here

Question 3

1 / 1 pts

```
struct  {
  char name [ 1 ]
} ;
```

what is the error here ?

Correct!

- (selected) There is no semi-colon for field name
- unnamed struct/union that defines no instances
- name is defined as 1 cells
- There is no error here

Question 4

1 / 1 pts

Two structures cannot be compared.

Correct!

- (selected) True
- False

Question 5

1 / 1 pts

we can assign one structure to another structure of same type.

Correct!

- (●) True
- ( ) False

Question 6

1 / 1 pts

size of a structure is not just the sum of sizeof of each member.

This is because there might be gaps or paddings in structures causing additional memory

Correct!

- (●) True
- ( ) False

Question 7

1 / 1 pts

```
struct _processes {
char name [32] ;
int id ;
char status ;
} ;


struct _processes p1, *p2 ;


p2 = &p1 ; // is this good statement.
```

Correct!

- (●) True
- ( ) False

Question 8

1 / 1 pts

```
struct _processes {
char name [32] ;
int id ;
char status ;
} ;


struct _processes p1, *p2 , *p3;


p1 = p2 ;  // is this a good statement
```

- True
- False

Correct!

Question 9

1 / 1 pts

Look at the word document on typedefs

```
typedef   struct   _point  {
   int x,  y ;
} Point_t  ;
```

Point_t is a new type definition.

- True
- False

Correct!

Question 10

2 / 2 pts

consider this array of structures

```
struct _processes pArray  [ 8 ] , *p;
```

p = & pArray [2] ;

p++ ;

// now, where does the pointer p is pointing to ?

Correct!

- (●) index 3
- ( ) index 2
- ( ) index 1
- ( ) index 0

Question 11

1 / 1 pts

typedef struct _person

{

  int age ;

} Person_T ;

Person_T is a use defined type, but No storage is allocated

Correct!

- (●) True
- ( ) False

Question 12

1 / 1 pts

typedef struct _person

{

  int age ;

  char ch;

} Person_T ;

We always recommend to use sizeof operator to determine the number of bytes allocated to this structure.

Correct!

- (●) True
- ( ) False

Question 13

1 / 1 pts

```
typedef  struct _person
{
  int age ;
  char ch;
} Person_T ;

Person_T  p ;
```

p is variable of type Person_T

Correct!

- (●) True
- ( ) False

Question 14

1 / 1 pts

```
typedef  struct _person
{
  int age ;
  char ch;
} Person_T ;

Person_T  p ;
Person_T  *ptr ;
```

ptr = &p ; // is this a valid statement

Correct!

- (●) True
- ( ) False

Quiz Score: **15** out of 15

Quiz on pthread and semaphores

Due Dec 10 at 11:59pm **Points** 12 **Questions** 12 **Time Limit** 180 Minutes

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	12 minutes	12 out of 12

Score for this quiz: **12** out of 12
Submitted Dec 10 at 2:12pm
This attempt took 12 minutes.

Question 1

1 / 1 pts

sem_wait _____

- increments by 1
- decrements by 1 — Correct!
- decrements by 2
- increments by 2

Question 2

1 / 1 pts

sem_post _____

- increments by 1 — Correct!
- decrements by 1
- decrements by 2
- increments by 2

Question 3

1 / 1 pts

You initialize this _____ to a value

Correct!

- [x] semaphore
- [ ] exec
- [ ] pipe
- [ ] pthread

Question 4

1 / 1 pts

created semaphores can be listed in _____

- [ ] /dev/semaphores/

Correct!

- [x] /dev/shm/
- [ ] /dev/sem/
- [ ] /bin/semophores

Question 5

1 / 1 pts

you open a semaphore with this _____

- [ ] sem_getvalue

Correct!

- [x] sem_open
- [ ] sem_wait
- [ ] sem_post

Question 6

1 / 1 pts

sem_wait is _____

- called to destroy semaphores
- a macro

Correct!

- blocking call
- non-blocking call

Question 7

1 / 1 pts

Before calling sem_wait, it is recommended to call _____

- sem_wait

Correct!

- sem_getvalue
- sem_open
- sem_post

Question 8

1 / 1 pts

{

pthread_mutex_lock

x++;

pthread_mutex_unlock

exit

}

of the four line above, which is a critical section

- pthread_mutex_lock

- exit
- pthread_mutex_unlock

Correct!

- x++

Question 9

1 / 1 pts

MutEx stands

- Mu Tech
- Mute Exception
- Mutual Funds

Correct!

- Mutually Exclusive

Question 10

1 / 1 pts

a thread is _____

Correct!

- lightweight
- heavyweight
- a new process
- a old process

Question 11

1 / 1 pts

pthreads executes functions in the _____

- text segment
- external memory
- background

Correct!

- stack

Question 12

1 / 1 pts

When you create several threads, the parent process can wait using _____

- pthread_pause
- pthread_sleep

Correct!

- pthread_wait
- pthread_suspend

Quiz Score: **12** out of 12

Quiz on thread and fork

Due Dec 10 at 11:59pm **Points** 12 **Questions** 12 **Time Limit** 120 Minutes

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	7 minutes	12 out of 12

Correct answers are hidden.

Score for this quiz: **12** out of 12
Submitted Dec 10 at 2:21pm
This attempt took 7 minutes.

Question 1

1 / 1 pts

Consider this code in a program:

int pid = fork ( ) ;

How many child processes would be created by this fork statement ?

- 2
- 3
- 0
- 1 (selected)

Question 2

1 / 1 pts

_____ creates a new process by duplicating the calling process. The new process is referred to as the *child* process. The calling process is referred to as the *parent* process

- do_fork
- create_process ( )

- create_thread
- fork ( )

Question 3

1 / 1 pts

when we do fork, the child process and the parent process run in _____

- same address space
- separate memory spaces.
- always runs on background
- always becomes a zombie process

Question 4

1 / 1 pts

Immediately after a **fork**() both memory spaces _____

- do not have same content
- have same content
- are erased with 0
- are initialized with 1

Question 5

1 / 1 pts

```
pid = fork ( );
```

The child process will have pid = _____ ?

- 3
- 2

- 1
- 0 (selected)

Question 6

1 / 1 pts

pid = fork ( );

in the parent process , pid will have process id _____

- child's process ID (selected)
- 1
- 0
- of parent itself

Question 7

1 / 1 pts

on a fork ( ), The child inherits copies of the parent's set of _____ file descriptors.

- short
- long
- open (selected)
- closed

Question 8

1 / 1 pts

while forking, On failure, _____ is returned in the parent, no child process is created, and ***errno*** ***(http://man7.org/linux/man-pages/man3/errno.3.html)*** is set appropriately

- 2
- 1

- 0
- -1 (selected)

Question 9

1 / 1 pts

```
The _______ function starts a new thread in the calling  process.
```

- pipe
- exec
- fork
- pthread_create() (selected)

Question 10

1 / 1 pts

When you create a thread, a new process is created

- True
- False (selected)

Question 11

1 / 1 pts

If you want to create two separate processes, you create using thread

- True
- False (selected)

Question 12

1 / 1 pts

You pass functions when you create a _____

- (•) thread
- ( ) file
- ( ) fork
- ( ) pipe

Quiz Score: **12** out of 12