EE2310 C++程式設計 HW2 (Ch 4,5)

**A. Choice選擇題:30%**

1) Relational operators allow you to \_\_\_C\_\_\_\_\_ numbers.

A) add

B) multiply

C) compare

D) average

E) verify

2) The \_\_\_E\_\_\_\_\_ statement can cause other program statements to execute only under certain conditions.

A) logical

B) relational

C) cin

D) cout

E) if

3) In C++ when a relational expression is false, it has the value \_\_\_B\_\_\_\_\_.

A) 1

B) 0

C) -1

D) "0"

E) of any negative number

4) A(n) \_\_\_A\_\_\_\_\_ is a variable, usually a bool, that signals when a condition exists.

A) flag

B) identifier

C) named constant

D) condition variable

E) logical variable

5) The \_\_\_B\_\_\_\_\_ statement executes one block of statements if a test condition is true, and another block if the condition is false.

A) if

B) if/else

C) if/else if

D) switch

E) trailing else

6) The \_\_\_\_B\_\_\_\_ statement executes one block of statements if a test condition is true, and another block if the condition is false.

A) if

B) if/else

C) if/else if

D) switch

E) trailing else

7) A trailing else placed at the end of an if/elseif statement provides a default action when \_\_\_A\_\_\_\_\_ of the if conditions is/are true.

A) none

B) any one

C) only the last one

D) at least two

E) all

8) When an if statement is placed within the conditionally-executed code of another if statement, this is known as a(n) \_\_\_\_C\_\_\_\_.

A) complex if

B) overloaded if

C) nested if

D) conditional if

E) double if

9) The C++ \_\_\_E\_\_\_\_\_ operator represents logical AND.

A) ++

B) |

C) ||

D) &

E) &&

10) The \_\_\_\_D\_\_\_\_ operator takes an operand and reverses its truth or falsehood.

A) relational

B) &&

C) ||

D) !

E) !=  
11) The \_\_\_\_C\_\_\_\_ statement acts like a chain of if statements. Each performs its test, one after the other, until one of them is found to be true.

A) if/then

B) if/else

C) if/elseif

D) if/notif

E) if/endif

12) A flag is a variable, usually of data type \_\_\_D\_\_\_\_\_, that signals when a condition exists.

A) char

B) double

C) long

D) bool

E) logical

13) When a program lets the user know that an invalid menu choice has been made, this is an example of \_\_\_A\_\_\_\_\_.

A) input validation

B) output validation

C) menu reselection

D) invalidation

E) being user unfriendly

14) If s1 and s2 are string objects, s1 == s2 is true when \_\_\_D\_\_\_\_\_.

A) s1 = "lion" and s2 = "lioness"

B) s1 = "dog" and s2 = "DOG"

C) s1 = "cat" and s2 = "cat "

D) None of these because one or more characters in the strings have different ASCII codes.

E) None of these because string objects cannot be compared with relational operators.

15) The default section of a switch statement performs a similar task as the \_\_C\_\_\_\_\_\_ portion of an if/elseif statement.

A) conditional test

B) break

C) trailing else

D) elseif

E) body

16) \_\_\_\_B\_\_\_\_ are C++ operators that change their operands by one.

A) + and -

B) ++ and --

C) binary and unary

D) arithmetic and relational

E) conditional and relational

17) The ++ operator \_\_\_D\_\_\_\_\_.

A) is a unary operator

B) adds one to the value of its operand

C) can operate in prefix or postfix mode

D) All of the above.

E) Both B and C, but not A.

18) The while loop has two important parts: a condition that is tested and a statement or block of statements that is \_\_\_A\_\_\_\_\_.

A) repeated as long as the condition is true

B) repeated until the condition becomes true

C) done once if the condition is true

D) always done at least once, then repeated if the condition is true

E) always skipped

19) The while loop is a(n) \_\_\_D\_\_\_\_\_ loop and the do-while loop is a(n) \_\_\_\_\_\_\_\_ loop.

A) finite, infinite

B) infinite, finite

C) simple, complex

D) pretest, post test

E) post test, pretest

20) The statements in the body of a do-while loop are always executed \_\_\_\_B\_\_\_\_.

A) exactly once

B) at least once

C) at least twice

D) forever until the user hits the break key

E) until the test condition becomes true

21) A(n) \_\_\_\_E\_\_\_\_ is a variable that controls the number of times a loop iterates.

A) counter

B) accumulator

C) sentinel

D) total

E) loop control variable

22) A(n) \_\_\_A\_\_\_\_\_ is a variable that is regularly incremented or decremented each time a loop iterates.

A) counter

B) accumulator

C) sentinel

D) total

E) loop control variable

23) A(n) \_\_\_\_C\_\_\_\_ is a special value that marks the end of a list of values.

A) counter

B) accumulator

C) sentinel

D) total

E) loop control variable

24) The statements in the body of a while loop will never be executed if the test condition \_\_\_B\_\_\_\_\_.

A) is initially true

B) is initially false

C) changes from true to false

D) changes from false to true

E) is not Boolean

25) The do-while loop is a(n) \_\_\_E\_\_\_\_\_ loop and the while loop is a(n) \_\_\_\_\_\_\_\_ loop.

A) finite, infinite

B) infinite, finite

C) simple, complex

D) pretest, post test

E) post test, pretest

26) In a for statement, the \_\_A\_\_\_\_\_\_ expression is executed only once.

A) initialization

B) test

C) repeat

D) validate

E) update

27) The \_\_\_B\_\_\_\_\_ statement causes a loop to terminate early.

A) stop

B) break

C) quit

D) terminate

E) continue

28) If a while loop has no braces around the body of the loop \_\_\_C\_\_\_\_\_.

A) there is no loop body

B) the loop body ends when the endwhile statement is encountered

C) the loop body contains one statement

D) the loop body contains one line

E) a compiler error will occur

29) The ideal type of loop to use if you want a user to enter exactly 20 values is a(n) \_\_\_B\_\_\_\_ loop.

A) do-while

B) for

C) sentinel controlled

D) infinite

E) nested

30) The ideal type of loop to use for repeating a menu is a(n) \_\_\_A\_\_\_\_\_ loop.

A) do-while

B) for

C) sentinel controlled

D) infinite

E) nested

**B. 填充題:10%**

1) True/False: Relational expressions and logical expressions are both Boolean, which means they evaluate to true or false.T

2) True/False: In C++ an expression that evaluates to 5, -5, or for that matter anything other than 0, is considered true by an if statement. T

3) True/False: Assuming moreData is a Boolean variable, the following two tests are logically equivalent. T

if (moreData == true)

if (moreData)

4) True/False: The block of code in the body of a while statement can contain an unlimited number of statements, provided they are enclosed in braces. T

5) True/False: An initialization expression may be omitted from the for loop if no initialization is required. T

6) True/False: The for statement has three expressions in its form: T

for (expr1;expr2;expr3)

any or all of the expressions can be omitted in the for statement.

7) True/False: To exit from a nested loop, a break statement in the innermost loop is needed. F

8) True/False: the following two code segments are totally identical: F

int i,n=0,sum=0; int i,n=0,sum=0;

while(n<10){ for(n=0;n<10;n++){

cin >> i; cin >> i;

if(i==0) continue; if(i==0)continue;

sum += i; n++; sum+=i;

} }

9) True/False: the output produced by the following for statement is 10 5 3 2 1

for(i=10;i>=1;i/=2) cout << i++ << “ “; F

10) True/False: The following two statements are equivalent. (assuming that the loop bodies are the same) F

(a) for(i=0;i<10;i++) {…}

(b) for(i=0; i++<10;) {…}