# AP CompSci Unit 3 Test

if-else, loops, boolean statements

Thank you. Your responses have been automatically graded. Here are your results.

**Score Summary**

| (Click on question number to jump to question.) | | points earned | points possible |
|---|---|---|---|
| **Question 1** | correct | 1 | 1 |
| **Question 2** | correct | 1 | 1 |
| **Question 3** | correct | 1 | 1 |
| **Question 4** | correct | 1 | 1 |
| **Question 5** | correct | 1 | 1 |
| **Question 6** | correct | 1 | 1 |
| **Question 7** | correct | 1 | 1 |
| **Question 8** | correct | 1 | 1 |
| **Question 9** | correct | 1 | 1 |
| **Question 10** | correct | 1 | 1 |
| **Question 11** | correct | 1 | 1 |
| **Question 12** | correct | 1 | 1 |
| **Question 13** | correct | 1 | 1 |
| **Question 14** | correct | 1 | 1 |
| **Question 15** | correct | 1 | 1 |
| **Question 16** | correct | 1 | 1 |
| **Question 17** | correct | 1 | 1 |
| **Question 18** | correct | 1 | 1 |
| **Question 19** | correct | 1 | 1 |
| **Question 20** | correct | 1 | 1 |
| **Question 21** | correct | 1 | 1 |
| **Question 22** | correct | 1 | 1 |
| **Question 23** | correct | 1 | 1 |
| **Question 24** | correct | 1 | 1 |
| **Question 25** | correct | 1 | 1 |
| **Question 26** | correct | 1 | 1 |
| **Question 27** | correct | 1 | 1 |
| **Question 28** | incorrect | 0 | 1 |
| **Question 29** | incorrect | 0 | 1 |
| **Question 30** | correct | 1 | 1 |
| **Question 31** | correct | 1 | 1 |
| **Question 32** | correct | 1 | 1 |
| **Question 33** | correct | 1 | 1 |
| **Question 34** | incorrect | 0 | 1 |
| **Question 35** | correct | 1 | 1 |
| **Question 36** | correct | 1 | 1 |
| **Question 37** | correct | 1 | 1 |
| **Question 38** | correct | 1 | 1 |

1. What is output by the code below?

   ```
   for(int h=1; h<6; h++)
   System.out.print( h );
   ```

   - 123
   - 1234
   - 12345 (correct answer, your response)
   - 123456

   **Points earned:** 1 out of 1

2. What is the returned by the call go(6) ?

   ```
   public static int go(int x)
   {
     if (x>0)
       return 1;
     return 2;
   }
   ```

   - 1 (correct answer, your response)
   - 12
   - 2
   - 21

   **Points earned:** 1 out of 1

3. What is returned by the call go(5)?

   ```
   public static int go(int x)
   {
   int q=0;
   while( x > 0)
   {
   q = q + x;
   x = x - 1;
   ```

```
}
return q;
}
```

- 10
- 15 (correct answer, your response)
- 28
- 36

**Points earned:** 1 out of 1

4. What is output by the code below?

```
int u=2;
while(5 > u)
{
System.out.print(u);
u++;
}
```

- nothing
- 2
- 23
- 234 (correct answer, your response)

**Points earned:** 1 out of 1

5. What is the output?

```
for(int g=1; g<4; g++)
System.out.print(g);
```

- 12
- 123 (correct answer, your response)
- 1234
- 321

**Points earned:** 1 out of 1

6. Which of the following operators is the logical not operator?    [ ▼ ]

- ||
- &&
- ! (correct answer, your response)
- ^

- %

**Points earned:** 1 out of 1

7. Which of these is a correct description of the code below?

```
for(i=0; i<10; i++)
{
//instructions
}
```

- it repeats the instructions ten times (correct answer, your response)
- it repeats the instructions indefinitely
- it repeats the instructions until the user stops it
- it repeats the instructions once

**Points earned:** 1 out of 1

8. What is the following code attempting to calculate?

```
public static int go( int x, int y)
{
int cnt = 0
for(int n = x; n < y; n = n + 1)
if(n % 2 != 0 )
cnt++;
return cnt;
}
```

- The code is counting the number of negative numbers between x and y.
- The code is counting the number of positive numbers between x and y.
- The code is counting the number of odd numbers between x and y. (correct answer, your response)
- The code is counting the number of even numbers between x and y.
- The code is counting the number of prime numbers between x and y.

**Points earned:** 1 out of 1

9. What is output by the code below?

```
int mark=0;
for(int b=0; b<10; b=b+3)
{
```

```
mark++;
}
out.println(mark);
```

- 2
- 3
- 4 (correct answer, your response)
- 5

**Points earned:** 1 out of 1

10. What is returned by the call go( 10 ) ?

```
public static String go( int x)
{
String s = "";
for(int n = x; n > -3; n = n - 3)
s = s + x + " ";
return s;
}
```

- 10 7 4 1 -2 (correct answer, your response)
- 7 4 1 -2 -5 -8
- 10 7 4 1 -2 -5
- 10 7 4 1 -2 -5 -8

**Points earned:** 1 out of 1

11. What is output by the code below?

```
int g = 5;
if(g == 5)
  out.print("same");
else
  out.print("notsame");
out.print("done");
```

- same
- notsame
- done
- samedone (correct answer, your response)
- notsamedone

**Points earned:** 1 out of 1

12. Logical operator || means

    Ex.
    if(hitpoints >10 || energy > 100 )
    {
      code
    }

    - or (correct answer, your response)
    - and
    - not
    - que

    **Points earned:** 1 out of 1

13. What is the output?

    int x = 789;
    if(x>700)
        out.println("big");
    else
        out.println("little");

    - big (correct answer, your response)
    - little
    - 700
    - 0

    **Points earned:** 1 out of 1

14. What is the output?

    String s = "ABC";
    if(s.equals("ABC"));
        out.println("same");

    - same (correct answer, your response)
    - abc
    - ABC

- there is no output

**Points earned:** 1 out of 1

15. What is output by the code below?

    boolean bNine=true;
    boolean bTen=false;
    out.println(bNine ||(bNine && bTen));

    [        ▼]

    - 0
    - 1
    - true (correct answer, your response)
    - false
    - bNine

    **Points earned:** 1 out of 1

16. What is returned by the call go(7)?

    ```
    public static int go(int x)
    {
    int q=0;
    while( x > 0)
    {
    q = q + x;
    x = x - 1;
    }
    return q;
    }
    ```

    - 28 (correct answer, your response)
    - 36
    - 45
    - 21

    **Points earned:** 1 out of 1

17. What relation does > test?  [            ▼]

    - greater than (correct answer, your response)
    - less than
    - equal to

- less than or equal to
- greater than or equal to

**Points earned:** 1 out of 1

18. What is output by the code below?

```
int e=5;
if(!(e>3))
   System.out.print("fun");
System.out.print("go");
```

- go (correct answer, your response)
- fun
- gofun
- there is no output

**Points earned:** 1 out of 1

19. What is output by the code below?

```
String m = "h";
int n =0;
do{
m=m+"h";
n++;
}while(!m.equals("hhhhh"));
out.println(m + " - " + n);
```

- hhhhh - 5
- hhhh - 4
- hhhhh - 4 (correct answer, your response)
- hhhhh - 6
- hhh - 3

**Points earned:** 1 out of 1

20. To increment means to:

- add (correct answer, your response)
- subtract
- divide
- multiply

**Points earned:** 1 out of 1

21. Consider the following code segment shown below.

```
int x = 5;
while ( /* missing code */ )
{
System.out.print(x + " ");
x = x + 5;
}
```

Listed below are possible replacements for /* missing code */.

I. x <= 20
II. x < 20
III. x <= 19

Which of the proposed replacements for /* missing code */ will cause the code segment to print only the values 5 10 15 20?

- I only (correct answer, your response)
- II only
- III only
- I and II only
- II and III only
- I and III only
- I, II , and III

**Points earned:** 1 out of 1

22. What is the output?

```
int t=2, summer=0;
while(t < 12)
{
summer = summer + t;
t = t + 1;
}
System.out.print(summer);
```

- 35
- 44

- 54
- 65 (correct answer, your response)

**Points earned:** 1 out of 1

23. What is output by the code below?

```
int a=5;
if(a>3 && a<10)
    System.out.print("fun");
System.out.print("go");
```

- go
- fun
- gofun
- fungo (correct answer, your response)

**Points earned:** 1 out of 1

24. What is the output by the code below?

```
int w=1;
do{
w++;
System.out.print(w);
}while(w<=5);
```

- 35
- 1234
- 12345
- 345
- 23456 (correct answer, your response)

**Points earned:** 1 out of 1

25. Which of the following operators is the logical and operator?    ▼

- ||
- && (correct answer, your response)
- !
- ^
- %

**Points earned:** 1 out of 1

26. Which of the following loops will print out the numbers 5, 10, 15, 20, 25?

I.
```
int i=5;
while(i<=25)
{
out.println(i);
i=i+5;
}
```

II.
```
for(int i=5;i<=25;i=i+5)
{
out.println(i);
}
```

III.
```
for(int i=4;i<24;i=i+5)
{
out.println(i+1);
}
```

- I only
- II only
- I and III only
- II and III only
- I, II, and III (your response)

**Points earned:** 1 out of 1
**Instructor's comments:** error in answer choices, free point

27. What is the returned by the call go(-9) ?

```
public static String go(int x)
{
  if (x==5)
    return "same";
  else if (x>5)
    return "notsame";
  return "done";
}
```

- same
- notsame
- done (correct answer, your response)
- samedone

**Points earned:** 1 out of 1

28. Consider the following code segment shown below.

```
int x = 0;
while ( /* missing code */ )
{
x = x + 5;
System.out.print(x + " ");
}
```

Listed below are possible replacements for /* missing code */.

I. x < 20
II. x < 25
III. x <= 25

Which of the proposed replacements for /* missing code */ will cause the code segment to print only the values 5 10 15 20 25?

- I only
- II only
- III only (your response)
- I and II only
- II and III only (correct response)
- I and III only
- I, II , and III

**Points earned:** 0 out of 1

29. You should never put a _____what before an open scroll brace? [ ▼ ]

- bracket
- car door
- window
- semicolon (correct answer)
- none of these (your response)

**Points earned:** 0 out of 1

30. What is the output?

    String s = "abc";
    if(s.equals("ABC"))
      out.println("same");

    - same
    - abc
    - ABC
    - there is no output (correct answer, your response)

    **Points earned:** 1 out of 1

31. What is output by the code below?

    int c=5;
    if(c>3 || c>10)
      System.out.print("fun");
    System.out.print("go");

    - go
    - fun
    - gofun
    - fungo (correct answer, your response)

    **Points earned:** 1 out of 1

32. Which of the following loops will print out the numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10?

    I.
    for(int i=1;i<=10;i++)
    {
    out.println(i);
    }

    II.
    int i=0;
    while(i<10){

```
out.println(i);
i++;
}


III.
int i=0;
while(i<10)
{
i++;
out.println(i);
}
```

- I only
- II only
- I and II only
- <span style="color:green">I and III only (correct answer, your response)</span>
- II and III only

**Points earned:** 1 out of 1


33. What is output by the code below?

```
for(int e=1; e<3; e++)
System.out.print(e);
```

- <span style="color:green">12 (correct answer, your response)</span>
- 123
- 1234
- 321

**Points earned:** 1 out of 1

34. Which of the following expressions is equivalent to the expression shown below?

! ( !a && !b )


I.
a && b

II.
!a || !b

III.

a || b

[ ▼ ]

- I only (your response)
- II only
- III only (correct answer)
- I and II only
- I and III only
- II and III only
- I, II, and III

**Points earned:** 0 out of 1

35. What relation does < test? [ ▼ ]

- less than (correct answer, your response)
- greater than
- equal to
- greater than or equal to
- less than or equal to

**Points earned:** 1 out of 1

36. Which of the following is the assignment operator? [ ▼ ]

- = (correct answer, your response)
- ==
- >
- <
- none of these

**Points earned:** 1 out of 1

37. x--

- decrement (correct answer, your response)
- desacrate
- implicate
- replicate

**Points earned:** 1 out of 1

38. To decrement means to:

- subtract (correct answer, your response)
- add
- divide
- multiply

**Points earned:** 1 out of 1

39. What is output by the code below?

```
int m = 0;
while(m < 4)
{
System.out.print(m);
m++;
}
```

- 12
- 012
- 0123 (correct answer, your response)
- 123

**Points earned:** 1 out of 1

40. Logical operator && means
Ex.
if(hitpoints >10 && hitpoints <100 )
{
  code
}

- and (correct answer, your response)
- or
- not
- what

**Points earned:** 1 out of 1