

AMCAT COMPUTER PROGRAMMING TEST 3 Report !

86 users have taken the test till now.

28/30

Highest Marks

0.0/30

Lowest Marks

9.23/30

Avg. Marks

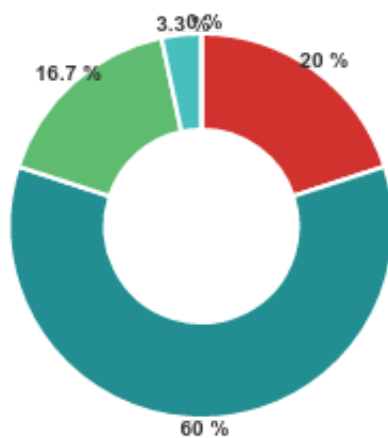
16 m 11.3 s

Avg. Time Spent

37%

Avg. Accuracy

Question Difficulty



Very Tough : 6

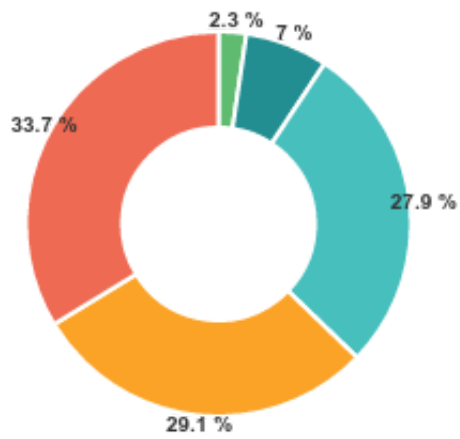
Tough : 18

Average : 5

Easy : 1

The difficulty level of a question is calculated dynamically based on the performance of the students. Ex: The very tough questions are the ones that less than 20% of the students solved correctly.

Student Performance



Excellent : 2
Good : 6
Average : 24
Poor : 25
Very Poor : 29

Student performance is calculated based on the marks that students obtained.

- > 90 : Excellent
- >70 to <= 90 : Good
- > 40 to <= 70 : Average
- > 20 to <= 40 : Poor
- 0-20 : Very Poor

Overall

Computer Programming

✓ Score Comparision

Topper's Score	28
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Average Score	9.23
---------------	------

🎯 Accuracy Comparision

Topper's Accuracy	93.33 %
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Average Accuracy	37 %
------------------	------

🕒 Time Comparision

Topper's Time	3 m 55 s
---------------	----------

Average Time	16 m 11.3 s
--------------	-------------

🏆 Top Performers



Poonam kumari (/poonamkumari221994apr/)

Rank : 1 Score : 28/30



Ritam Singha (/ritamraiganj/)

Rank : 2 Score : 27/30



Ritam Singha (/babai141992/)

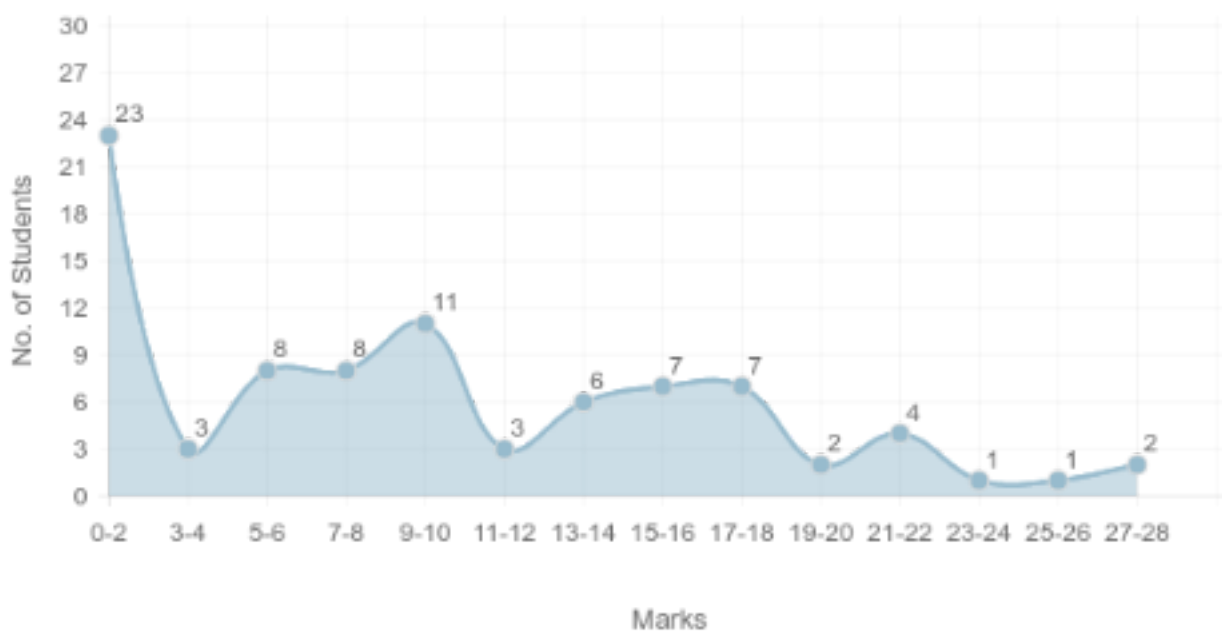
Rank : 3 Score : 26/30



Avinash Saini (/avinashsaini1994/)

Rank : 4 Score : 23/30

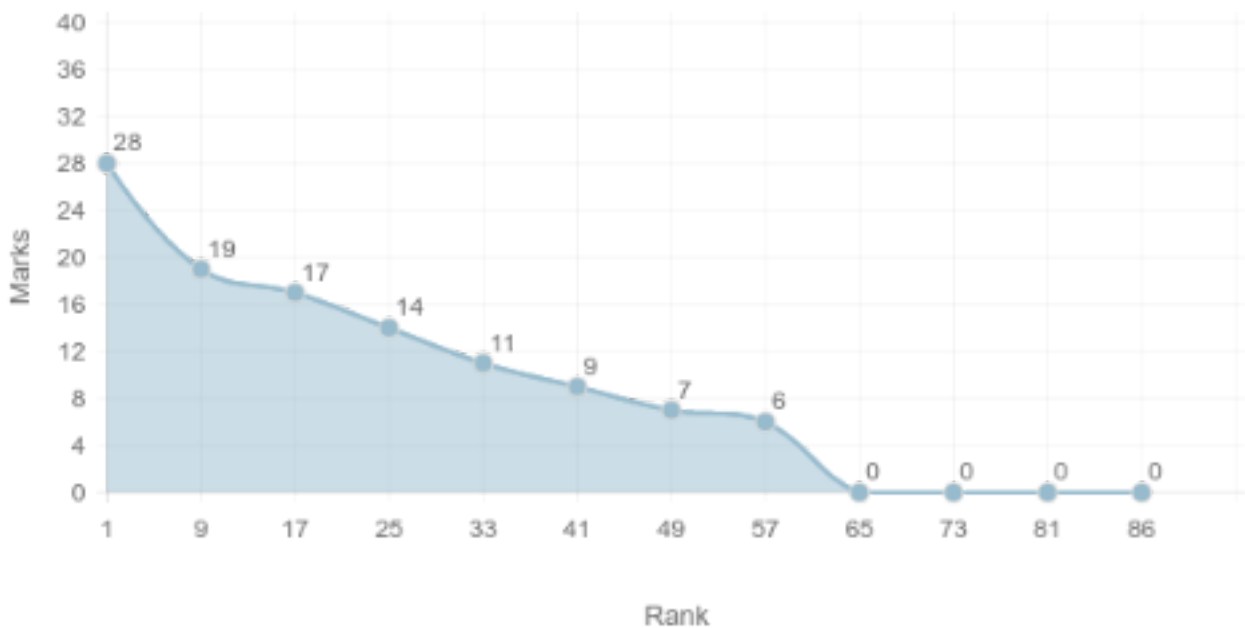
Marks vs No. of Students



This graph shows where the majority of the students stand. The Peak of the graph signifies the marks that most of the test takers obtained. The arrow indicates where you stand.

Note : Your goal is to be as far to the right as possible, that is where all the toppers are.

Rank v/s Marks



This graph shows the marks distribution among the test takers. The leftmost point on the graph shows the topper's marks while the rightmost point belongs to the person who stood last. The arrow indicates where you stand.

Note: Your goal is to be as far to the left as possible.

Student Wise Report

Question Wise Report

All | Tricky Qs | Very Tough Qs | Tough Qs | Average Qs | Easy Qs | Very Easy Qs

Question 1 of 30

Vibhu is given two codes, A and B, to solve a problem, which have complexity $O(n^4)$ and $\omega(n^3)$ respectively. Her client wants to solve a problem of size k , which is sufficiently large. Which code will Gautam deliver to the client, so that the execution is faster?

- A.** Code A
- B.** Code B
- ☒ **C.** Vibhu cannot determine
- D.** Both codes have the same execution time, so deliver any.

Explanation :

No explanation provided

Question Analytics

52 **USERS** ()

16 **USERS** ()

36 **USERS** ()

30.77 %

ATTEMPTED

☒ SOLVED CORRECTLY

☒ SOLVED INCORRECTLY

☒ ACCURACY

17.53 SECS

2.1 SECS

☒ AVG. SOLVING TIME

☒ FASTEST SOLVING TIME

Question 2 of 30

Pavithra is given two codes, A and B, to solve a problem, which have complexity $\theta(n^3)$ and $\omega(n^3)$ respectively. Her client wants to solve a problem of size k , which is sufficiently large. Which code should she deliver to the client in the present scenario?

- ☒ A. Code A
- ☐ B. Code B
- ☐ C. Both codes have the same execution time, so deliver any.
- ☐ D. None of these

Explanation :

No explanation provided

Question Analytics

53 USERS ()

22 USERS ()

31 USERS ()

41.51 %

ATTEMPTED

☒ SOLVED CORRECTLY

☒ SOLVED INCORRECTLY

☒ ACCURACY

23.71 SECS

11.9 SECS

☒ AVG. SOLVING TIME

☒ FASTEST SOLVING TIME

Question 3 of 30

Code A has to execute $4n^2 + 64$ program statements, while Code B has to execute $32n$ program statements for a problem of size n . The time for executing a single program statement is same for all statements. Rajesh was given a problem with a certain size k and he delivered Code A. What could be the possible value of k ?

- ☐ A. 1000
- ☐ B. 5
- ☐ C. 10
- ☒ D. 3

Explanation :

No explanation provided

Question Analytics

46 USERS ()

12 USERS ()

34 USERS ()

26.09 %

ATTEMPTED

☒ SOLVED CORRECTLY

☒ SOLVED INCORRECTLY

☒ ACCURACY

41.16 SECS

3.2 SECS

🕒 AVG. SOLVING TIME

⌚ FASTEST SOLVING TIME

Question 4 of 30

Saumya writes a code which has a function which calls itself. Which programming concept is Saumya using?

- A. This is bad programming practice and should not be done.
- ✔ B. Recursion
- C. Decision making
- D. Overloading

Explanation :

No explanation provided

Question Analytics

59 USERS ()

55 USERS ()

4 USERS ()

93.22 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

10.86 SECS

2 SECS

🕒 AVG. SOLVING TIME

⌚ FASTEST SOLVING TIME

Question 5 of 30

Shrishti writes the code for a function that computes the factorial of the inputted number n.

```
function factorial(n)
{
    if(n equals 1)
        return 1
    else
        MISSING STATEMENT
    end
}
```

Fill in the missing statement.

- A. return factorial(n-1)
- B. return n*factorial(n)
- C. return n*(n-1)
- ✔ D. return n*factorial(n-1)

Explanation :

No explanation provided

Question Analytics

56 USERS ()

40 USERS ()

16 USERS ()

71.43 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

21.42 SECS

3.7 SECS

🕒 AVG. SOLVING TIME

⌚ FASTEST SOLVING TIME

Question 6 of 30

Tanuj writes the code for a function that takes as input n and calculates the sum of first n natural numbers.

```
Function sum( n )
{
    if(??)
        return 1
    else
        return (n + sum(n-1))
    end
}
```

Fill in ?? in the code.

- ✔ A. n equals 1
- B. n equals 2
- C. n >= 1
- D. n > 1

Explanation :

No explanation provided

Question Analytics

53 USERS ()

32 USERS ()

21 USERS ()

60.38 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

22.97 SECS

2.7 SECS

🕒 AVG. SOLVING TIME

⌚ FASTEST SOLVING TIME

Question 7 of 30

Saloni writes the code for a function that takes as input n, an even integer and calculates the sum

of first n even natural numbers.

```
function sum( n )
{
  if(n equals 2)
    return 2
  else
    return (n + sum(n2))
  end
}
```

She then calls the function by the statement, sum(30). How many times will the function sum be called to compute this sum.

- A. 1
- B. 30
- ✓ C. 15
- D. 16

Explanation :

No explanation provided

Question Analytics

51 USERS ()

19 USERS ()

32 USERS ()

37.25 %

ATTEMPTED

✓ SOLVED CORRECTLY

✗ SOLVED INCORRECTLY

🎯 ACCURACY

40.15 SECS

2.5 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 8 of 30

Consider the following function

```
function calculate( n )
{
  if(n equals 5)
    return 5
  else
    return (n + calculate(n5))
  end
}
```

Shishir calls the function by the statement, calculate(20). What value will the function return?

- ✓ A. 50
- B. 200
- C. 35

D. 20

Explanation :

No explanation provided

Question Analytics

52 USERS ()

15 USERS ()

37 USERS ()

28.85 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

43.82 SECS

5.6 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 9 of 30

Ravi is writing a program in C++. C++ uses the 'for' keyword for loops. Due to distraction, Ravi writes 'gor' instead of 'for'. What will this result to?

- ✔ A. The code will not compile.
- B. The code will give an error while in execution
- C. The code may work for some inputs and not for others.
- D. It will create no problems.

Explanation :

No explanation provided

Question Analytics

57 USERS ()

37 USERS ()

20 USERS ()

64.91 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

19.4 SECS

2.3 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 10 of 30

What does a compiler do?

- ✔ A. Converts code from a high level language to a low level language
- B. Necessarily converts the code into assembly language
- C. Converts code from a low level language to a high level language
- D. Necessarily converts the code into machine language

Explanation :

No explanation provided

Question Analytics

58 **USERS** ()

20 **USERS** ()

38 **USERS** ()

34.48 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

18.25 SECS

3.3 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 11 of 30

A program is compiled by Tarun on his machine. Whether it will run on a different computer will depend upon:

- A. Operating system on the computer
- B. Hardware configuration of the computer
- ✔ C. Both operating system and hardware configuration
- D. The language of the program

Explanation :

No explanation provided

Question Analytics

59 **USERS** ()

26 **USERS** ()

33 **USERS** ()

44.07 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

17.85 SECS

5.5 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 12 of 30

Sakshi writes a code in a highlevel programming language on a PentiumIII machine, which she wants to execute on a Motorola chip. What of the following will she run on the code?

- A. An interpreter
- B. A compiler
- ✔ C. A cross-compiler
- D. Linker

Explanation :

No explanation provided

Question Analytics

55 USERS ()

22 USERS ()

33 USERS ()

40.0 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

18.89 SECS

9.7 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 13 of 30

Shahaana has a 10,000 line code. She is trying to debug it. She knows there is a logical error in the first 25 lines of the code. Which of the following will be an efficient way of debugging:

- A. Compile the whole code and step into it line by line
- ✔ B. Use an interpreter on the first 25 lines.
- C. Compile the whole code and run it
- D. None of these

Explanation :

No explanation provided

Question Analytics

54 USERS ()

34 USERS ()

20 USERS ()

62.96 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

19.1 SECS

1.8 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 14 of 30

Farhan writes a code to find the factorial of an inputted number. His code gives correct answer for some inputs and incorrect answers for others. What kind of error does his program have?

- A. Syntactical error
- B. Runtime Error
- ✔ C. Logical Error

D. None of these

Explanation :

No explanation provided

Question Analytics

56 **USERS** ()

38 **USERS** ()

18 **USERS** ()

67.86 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

17.21 SECS

1.7 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 15 of 30

Reshama is debugging a piece of code which takes several iterations of modifying and executing code, while Mohammad has to deliver a product to the customer, which the customer will run multiple times. Reshama wants her debug cycle to take minimum possible time, while Mohammad wants that his products run time is minimum. What tools should Reshama and Mohammad respectively use on their code?

- A. Compiler, Interpreter
- ✔ B. Interpreter, Compiler
- C. Compiler, Compiler
- D. Interpreter, Interpreter

Explanation :

No explanation provided

Question Analytics

52 **USERS** ()

24 **USERS** ()

28 **USERS** ()

46.15 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

26.78 SECS

1.6 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 16 of 30

Gautam writes a program to run on a Motorola processor on his Pentium computer. He wants to see how the program will execute on the Motorola processor using his Pentium machine. What tool will he use?

- A. Compiler
- B. Interpreter
- C. Assembler
- ☒ D. Simulator

Explanation :

No explanation provided

Question Analytics

58 USERS ()	26 USERS ()	32 USERS ()	44.83 %
ATTEMPTED	<input checked="" type="radio"/> SOLVED CORRECTLY	<input checked="" type="radio"/> SOLVED INCORRECTLY	<input checked="" type="radio"/> ACCURACY
19.24 SECS	1.7 SECS		
<input checked="" type="radio"/> AVG. SOLVING TIME	<input checked="" type="radio"/> FASTEST SOLVING TIME		

Question 17 of 30

Consider the following code:

```
function modify(y,z)
{
    y = y + 1;
    z = z + 1;
    return y - z
}
function calculate( )
{
    integer a = 5, b = 10, c
    c = modify(a, b);
    print a
    print space
    print c
}
```

Assume that a and b were passed by value. What will be the output on executing function calculate() ?

- A. 11 - 5
- B. 10 - 5
- C. 6 - 5
- ☒ D. 5 - 5

Explanation :

No explanation provided

Question Analytics

50 USERS ()

33 USERS ()

17 USERS ()

66.0 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

34.04 SECS

2.3 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 18 of 30

Consider the following code:

```
function modify(b,a)
{
    return a - b
}
function calculate( )
{
    integer a = 5, b = 12, c
    c = modify(a, b);
    print c
}
```

Assume that a and b were passed by reference. What will be the output of the program on executing function calculate() ?

- ✔ A. 7
- B. -7
- C. Error
- D. 8

Explanation :

No explanation provided

Question Analytics

53 USERS ()

20 USERS ()

33 USERS ()

37.74 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

25.38 SECS

6.5 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 19 of 30

Consider the following code:

```
function modify(y,z)
{
    y = y + 1
    z = z + 1
    return y - z
}
function calculate( )
{
    integer a = 12, b = 20, c
    c = modify(a, b);
    print a
    print space
    print c
}
```

Assume that a and b were passed by reference. What will be the output of the function calculate() ?

- A. 12 - 8
- ☒ B. 13 - 8
- C. 12 - 8
- D. 13 - 8

Explanation :

No explanation provided

Question Analytics

54 **USERS** ()

12 **USERS** ()

42 **USERS** ()

22.22 %

ATTEMPTED

☒ SOLVED CORRECTLY

☐ SOLVED INCORRECTLY

☐ ACCURACY

37.5 SECS

2.9 SECS

 AVG. SOLVING TIME

 FASTEST SOLVING TIME

Question 20 of 30

Afzal writes a piece of code, where a set of three lines occur around 10 times in different parts of the program. What programming concept can he use to shorten his program code length?

- A. Use for loops
- ☒ B. Use functions
- C. Use arrays
- D. Use classes

Explanation :

No explanation provided

Question Analytics

54 **USERS** ()

37 **USERS** ()

17 **USERS** ()

68.52 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

20.94 SECS

1.5 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 21 of 30

Geetika writes a piece of code, where a set of eight lines occur around 10 times in different parts of the program (Code A). She passes on the code to Deva. Deva puts the set of eight lines in a function definition and calls them at the 10 points in the program (Code B). Which code will run faster using an interpreter?

- ✔ **A.** Code A
- B.** Code B
- C.** Code A and Code B will run with the same speed
- D.** None of these

Explanation :

No explanation provided

Question Analytics

50 **USERS** ()

15 **USERS** ()

35 **USERS** ()

30.0 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

29.92 SECS

1.3 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 22 of 30

Consider the following code:


```

function modify(a,b)
{
    integer c, d = 2
    c = a*d + b
    return c
}
function calculate( )
{
    integer a = 5, b = 20, c
    integer d = 10
    c = modify(a, b);
    c = c + d
    print c
}

```

Assume that a and b were passed by value. What will be the output of the function calculate() ?

- A. 80
- ☒ B. 40
- C. 32
- D. 72

Explanation :

No explanation provided

Question Analytics

52 USERS ()

ATTEMPTED

33 USERS ()

☒ SOLVED CORRECTLY

19 USERS ()

☒ SOLVED INCORRECTLY

63.46 %

☒ ACCURACY

55.28 SECS

☒ AVG. SOLVING TIME

4.9 SECS

☒ FASTEST SOLVING TIME

Question 23 of 30

Consider the following code:

```

function modify(w,u)
{
    w = w + 2
    u = u - 3
    return (w - u)
}
function calculate( )
{
    integer a = 10, b = 20, c
    c = modify(a, b);
    print a
    print space
    print b
}

```

Assume that a was passed by value and b was passed by reference. What will be the output of the program on executing function calculate() ?

- A. 12 17
- ☒ B. 10 17
- C. 12 20
- D. 10 20

Explanation :

No explanation provided

Question Analytics

51 USERS ()

7 USERS ()

44 USERS ()

13.73 %

ATTEMPTED

☒ SOLVED CORRECTLY

☐ SOLVED INCORRECTLY

☐ ACCURACY

36.03 SECS

7.8 SECS

☐ AVG. SOLVING TIME

☒ FASTEST SOLVING TIME

Question 24 of 30

Consider the following function:

```
function run( )
{
    integer a = 0 // Statement 1
    while (a < 5)
    {
        integer c = 0    // Statement 2
        c = c + 1    // Statement 3
        a = a + 1
    }
    print c    // Statement 4
}
```

At which statement in this program will the compiler detect an error?

- A. Statement 1
- B. Statement 2
- C. Statement 3
- ☒ D. Statement 4

Explanation :

No explanation provided

Question Analytics

51 **USERS** ()

23 **USERS** ()

28 **USERS** ()

45.1 %

ATTEMPTED

☒ SOLVED CORRECTLY

☒ SOLVED INCORRECTLY

☒ ACCURACY

42.63 SECS

7.7 SECS

☒ AVG. SOLVING TIME

☒ FASTEST SOLVING TIME

Question 25 of 30

Which one of the following is the lowest level format to which the computer converts a higher language program before execution?

- A. English code
- ☒ B. Machine Code
- C. Assembly Language
- D. System Language

Explanation :

No explanation provided

Question Analytics

60 USERS ()

37 USERS ()

23 USERS ()

61.67 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

18.7 SECS

2.2 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 26 of 30

If you want to write a function that swaps the values of two variables, you must pass them by:

- A. Value only
- ✔ B. Reference only
- C. Either A or B
- D. Neither A nor B

Explanation :

No explanation provided

Question Analytics

61 USERS ()

30 USERS ()

31 USERS ()

49.18 %

ATTEMPTED

✔ SOLVED CORRECTLY

✘ SOLVED INCORRECTLY

🎯 ACCURACY

16.56 SECS

2 SECS

🕒 AVG. SOLVING TIME

🕒 FASTEST SOLVING TIME

Question 27 of 30

Consider the following code:

```

if (condition 1) {
    if (condition 2)
    { // Statement A }
    else
        if (condition 3)
        { // Statement B }
    else
        { // Statement C }
    else
        if (condition 4)
        { // Statement D }
    else
        { // Statement E }
}

```

Which of the following conditions will allow execution of statement C?

- A.** condition1 AND condition3
- B.** condition1 AND condition4 AND condition2
- C.** NOT(condition2) AND NOT(condition3)
- ☒ **D.** condition1 AND NOT(condition2) AND NOT(condition3)

Explanation :

No explanation provided

Question Analytics

52 **USERS** ()

ATTEMPTED

31 **USERS** ()

☒ SOLVED CORRECTLY

21 **USERS** ()

☒ SOLVED INCORRECTLY

59.62 %

☒ ACCURACY

37.32 SECS

☒ AVG. SOLVING TIME

8.3 SECS

☒ FASTEST SOLVING TIME

Question 28 of 30

Consider the following code:

```

if (condition 1) {
if (condition 2)
    { // Statement A }
    else
if (condition 3)
{ // Statement B}
else
{// Statement C }
else
    if (condition 4)
    {// Statement D}
    else
    {// Statement E}
}

```

Which of the following conditions will allow execution of statement E?

- A. condition1 AND condition3
- ☒ B. NOT(condition1) AND condition2 AND NOT(condition4)
- C. NOT(condition2) AND NOT(condition3)
- D. condition1 AND condition4 AND NOT(condition2) AND NOT(condition3)

Explanation :

No explanation provided

Question Analytics

49 USERS ()	21 USERS ()	28 USERS ()	42.86 %
ATTEMPTED	<input checked="" type="radio"/> SOLVED CORRECTLY	<input checked="" type="radio"/> SOLVED INCORRECTLY	<input checked="" type="radio"/> ACCURACY
40.78 SECS	2.4 SECS		
<input checked="" type="radio"/> AVG. SOLVING TIME	<input checked="" type="radio"/> FASTEST SOLVING TIME		

Question 29 of 30

Consider the following code:

```

if (condition 1) {
if (condition 2)
    { // Statement A }
    else
if (condition 3)
{ // Statement B}
else
{ // Statement C }
else
    if (condition 4)
    { // Statement D}
    else
    { // Statement E}
}

```

Which of the following condition will allow execution of statement A?

- A. NOT(condition2) AND NOT(condition3)
- B. condition1 AND condition4 AND condition2 AND NOT(condition2) AND NOT(condition3)
- ☒ C. condition1 AND condition2 AND condition4
- D. NOT(condition1) AND (condition2) AND NOT(condition4)

Explanation :

No explanation provided

Question Analytics

50 USERS ()	34 USERS ()	16 USERS ()	68.0 %
ATTEMPTED	<input checked="" type="radio"/> SOLVED CORRECTLY	<input checked="" type="radio"/> SOLVED INCORRECTLY	<input checked="" type="radio"/> ACCURACY
44.51 SECS	3.5 SECS		
<input checked="" type="radio"/> AVG. SOLVING TIME	<input checked="" type="radio"/> FASTEST SOLVING TIME		

Question 30 of 30

What does the following function do?

```

function operation (int a, int b)
{
if (a < b)
    { return operation(b, a) }
else
    { return a }
}

```

- ☒ A. Returns the max of (a,b)

- B. Returns the min of (a,b)
- C. Loops forever
- D. Always returns the second parameter

Explanation :

No explanation provided

Question Analytics

54 USERS ()	24 USERS ()	30 USERS ()	44.44 %
ATTEMPTED	✔ SOLVED CORRECTLY	✘ SOLVED INCORRECTLY	🎯 ACCURACY
27.95 SECS	2.1 SECS		
🕒 AVG. SOLVING TIME	🕒 FASTEST SOLVING TIME		