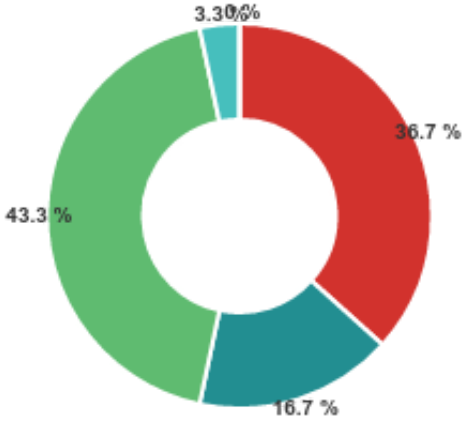
AMCAT COMPUTER PROGRAMMING TEST 4 Report !

96 users have taken the test till now.

25/30
Highest Marks
0.0/30
Lowest Marks
10.35/30
Avg. Marks
11 m 59.18 s
Avg. Time Spent
42.82%
Avg. Accuracy

Question Difficulty



Very Tough : 11

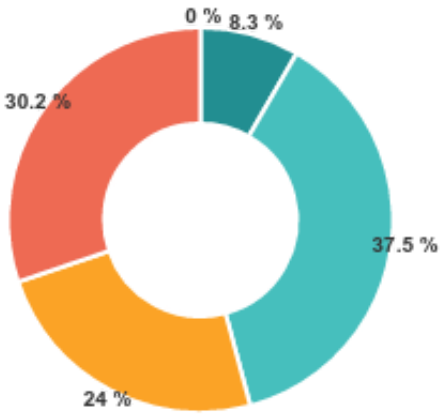
Tough : 5

Average : 13

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



Good : 8

Average : 36

Poor : 23

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

Score Comparision

Overall | **Computer Programming**

Topper's Score	25
Average Score	10.35

Accuracy Comparision

Topper's Accuracy	83.33 %
Average Accuracy	42.82 %

Time Comparision

Topper's Time	6 m 54 s
Average Time	11 m 59.18 s

Top Performers

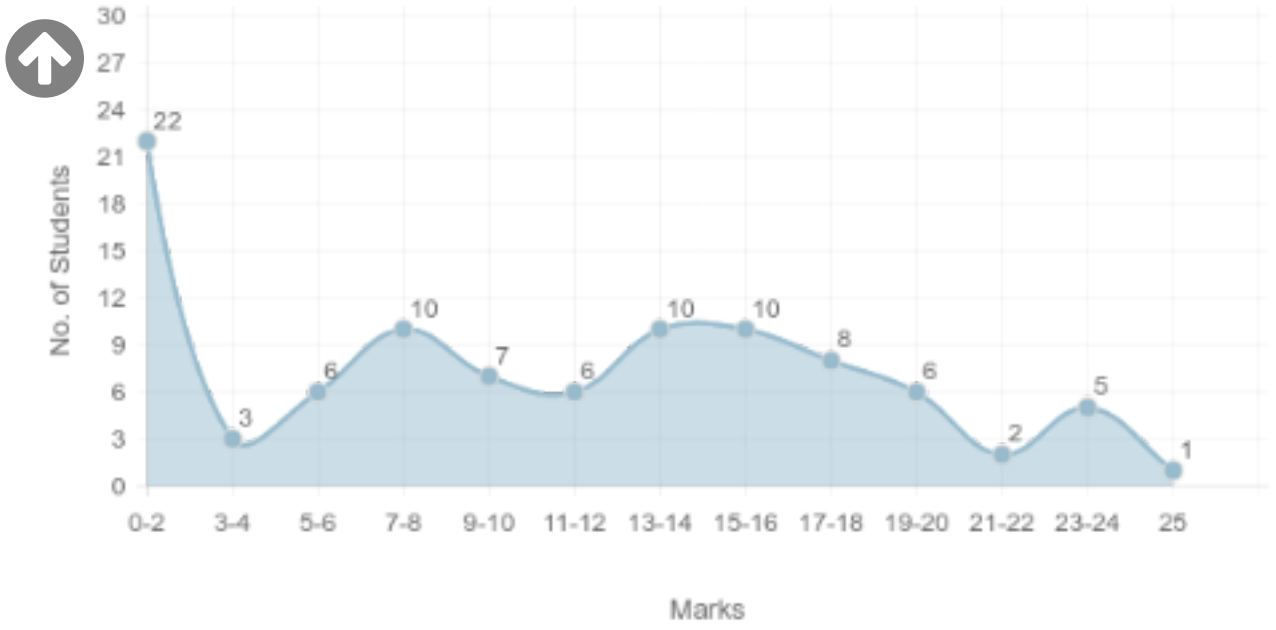
Ritam Singha (/ritamraiganj/)
Rank : 1 **Score : 25/30**

Poonam kumari (/poonamkumari221994apr/)
Rank : 2 **Score : 24/30**

kiran pamarthi (/pamarthikiran56/)
Rank : 3 **Score : 24/30**

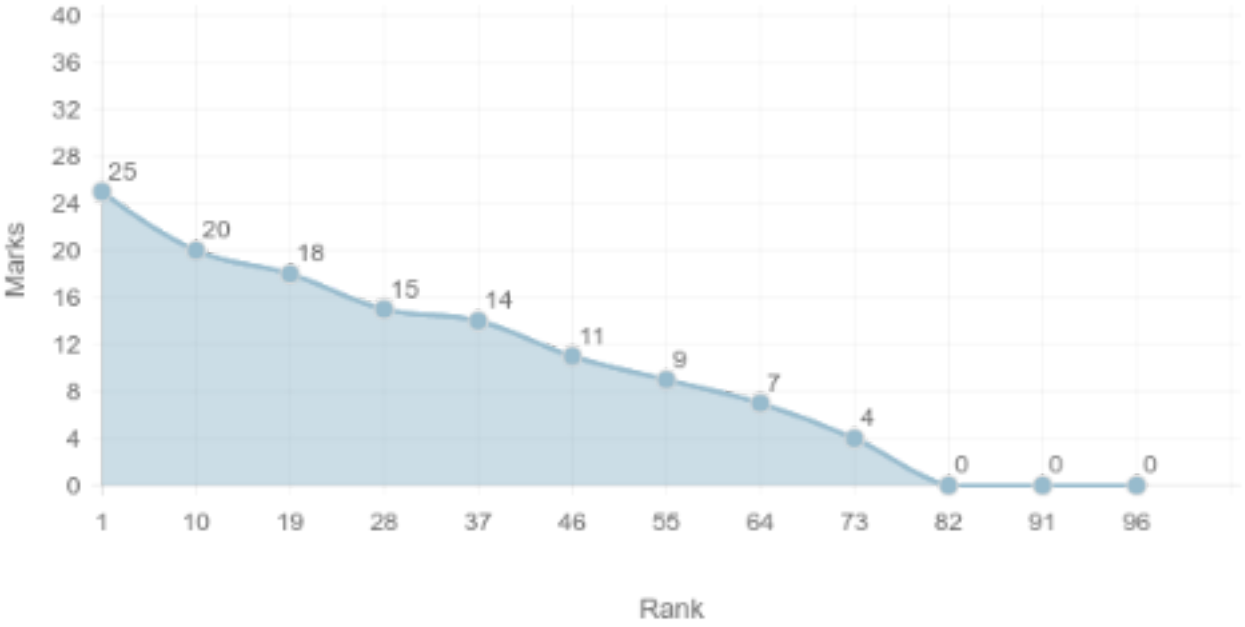
Arun Sharma (/arupika1993/)
Rank : 4 **Score : 24/30**

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

What does the following function do?

```
function operation (int a, int b)
{
  if (a > b)
  { return operation(b, a) }
  else
  { return a; }
}
```

A. Always returns the first parameter

✔ **B.** Returns the min of (a,b)

C. Returns the max of (a,b)

D. Loops forever

Explanation :

No explanation provided

Question Analytics

68 USERS ()	26 USERS ()	42 USERS ()	38.24 %

ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

31.78 SECS	2 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 2 of 30

```
function g(int n)
{
if (n > 0) return 1;
else return 1;
}
function f(int a, int b)
{
if (a > b) return g(ba);
if (a < b) return g(ab);
return 0;
}
```

If f(a,b) is called, what is returned?

- **A.** Always 1
- **B.** 1 if a > b, 1 if a < b, 0 otherwise
- **C.** 1 if a > b, 1 if a < b, 0 otherwise
- ✔ **D.** 0 if a eq.ls b, 1 otherwise

Explanation :

No explanation provided

Question Analytics

57 USERS ()	14 USERS ()	43 USERS ()	24.56 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

17.37 SECS	1.8 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 3 of 30

```
function g(int n)
{
if (n > 0) return 1;
else return 1;
}
function f(int a, int b)
{
if (a > b) return g(ab);
if (a < b) return g(ba);
return 0;
}
```

If f(a,b) is called, what is returned?

- **A.** 1 if a > b, 1 if a < b, 0 otherwise
- **B.** Always +1
- ✔ **C.** 0 if a eq.ls b, +1 otherwise
- **D.** 1 if a > b, 1 if a < b, 0 otherwise

Explanation :

No explanation provided

Question Analytics

55 USERS ()	15 USERS ()	40 USERS ()	27.27 %
ATTEMPTED	✔ SOLVED CORRECTLY	✖ SOLVED INCORRECTLY	ACCURACY

16.61 SECS	2.4 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 4 of 30

```
function g(int n)
{
  if (n > 0) return 1;
else return 1;
}
function f(int a, int b)
{
  if (a > b) return g(ab);
    if (a < b) return g(b+a);
    return 0;
  }
```

If f(a,b) is called, what is returned?

- **A.** Always +1

✔ **B.** 1 if a > b, 1 if a < b, 0 otherwise

C. 1 if a > b, 1 if a < b, 0 otherwise

D. 0 if a eq.ls b, 1 otherwise

Explanation :

No explanation provided

Question Analytics

61 USERS ()	11 USERS ()	50 USERS ()	18.03 %
ATTEMPTED	✔ SOLVED CORRECTLY	✖ SOLVED INCORRECTLY	⊙ ACCURACY

38.79 SECS	2.2 SECS
⏲ AVG. SOLVING TIME	⧗ FASTEST SOLVING TIME

Question 5 of 30

```
function g(int n)
{
if (n > 0) return 1;
else return 1;
}
function f(int a, int b)
{
if (a > b) return g(ba);
if (a < b) return g(a+b);
return 0;
}
```

If f(a,b) is called, what is returned?

A. Always +1

✔ **B.** 1 if a > b, 1 if a < b, 0 otherwise

C. 1 if a > b, 1 if a < b, 0 otherwise

D. 0 if a eq.ls b,1 otherwise

Explanation :

No explanation provided

Question Analytics

59 USERS ()	17 USERS ()	42 USERS ()	28.81 %
ATTEMPTED	✔ SOLVED CORRECTLY	✖ SOLVED INCORRECTLY	⊙ ACCURACY

30.99 SECS	2.5 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 6 of 30

Consider the following code:

```
for i= m to n increment 2
{ print "Hello!" }
```

Assuming m < n and exactly one of (m,n) is even, how many times will Hello be printed?

- ✔ **A.** (n - m + 1)/2
- **B.** 1 + (n - m)/2
- **C.** 1 + (n - m)/2 if m is even, (n - m + 1)/2 if m is odd
- **D.** (n - m + 1)/2 if m is even, 1 + (n - m)/2 if m is odd

Explanation :

No explanation provided

Question Analytics

56 USERS ()	18 USERS ()	38 USERS ()	32.14 %
ATTEMPTED	✔ SOLVED CORRECTLY	✖ SOLVED INCORRECTLY	ACCURACY

32.66 SECS	2.3 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 7 of 30

Consider the following code:

```
for i= m to n increment 2
{ print "Hello!" }
```

Assuming m < n and (m,n) are either both even or both odd, How many times will Hello be printed?

- **A.** (n - m + 1)/2
- ✔ **B.** 1 + (n - m)/2
- **C.** 1 + (n - m)/2 if m is even, (n - m + 1)/2 if m is odd
- **D.** (n - m + 1)/2 if m is even, 1 + (n-m)/2 if m is odd

Explanation :

No explanation provided

Question Analytics

59 USERS ()	17 USERS ()	42 USERS ()	28.81 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

29.9 SECS	2.6 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 8 of 30

Assuming n > 2, What value does the following function compute for odd n?

```
function f (int n)
{
  if (n eq.ls 1) { return 1 }
  if (n eq.ls 2) { return f(n1) + n/2 }
  return f(n2) + n;
}
```

A. 1 + 2 + 3 + 4 + ... + n

B. 1 + 3 + 5 + 7 + ... + n

C. n/2 + (1 + 3 + 5 + 7 + ... + n)

D. 1 + (1 + 3 + 5 + 7 + ... + n)

Explanation :

No explanation provided

Question Analytics

54 USERS ()	18 USERS ()	36 USERS ()	33.33 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

37.56 SECS	2.5 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 9 of 30

Assuming n > 2, What value does the following function compute for even n?

```
int f (int n)
{
  if (n eq.ls 1) { return 1 }
  if (n eq.ls 2) { return f(n1) + n/2 }
  return f(n2) + n
}
```

- **A.** 1 + 2 + 3 + 4 + ... + n
- **B.** 1 + (2 + 4 + 6 + 8 + ... + n)
- **C.** 1 + n/2 + (4 + 6 + 8 + ... + n)
- ✔ **D.** 2 + 4 + 6 + 8 + ... +

Explanation :

No explanation provided

Question Analytics

59 USERS ()	19 USERS ()	40 USERS ()	32.2 %
ATTEMPTED	✔ SOLVED CORRECTLY	✖ SOLVED INCORRECTLY	ACCURACY

41.78 SECS	2.9 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 10 of 30

The for loop is evalent to a while loop when

- **A.** There is no initialization expression
- **B.** There is no increment expression
- ✔ **C.** A and B combined are true
- **D.** It is never eq.valent

Explanation :

No explanation provided

Question Analytics

68 USERS ()	18 USERS ()	50 USERS ()	26.47 %
ATTEMPTED	✔ SOLVED CORRECTLY	✖ SOLVED INCORRECTLY	ACCURACY

25.8 SECS	5.3 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 11 of 30

Consider the statement

```
while (a < 10.0) { a = a*a }
```

Assuming a is positive, for what value of a will this code statement result in an infinite loop?

- ✔ **A.** a < 1.0
- **B.** a < sq.(10)
- **C.** a > sq.(10)
- **D.** a = 0

Explanation :

No explanation provided

Question Analytics

66 USERS ()	14 USERS ()	52 USERS ()	21.21 %
ATTEMPTED	✔ SOLVED CORRECTLY	✖ SOLVED INCORRECTLY	⊙ ACCURACY

30.8 SECS	3.1 SECS
⏲ AVG. SOLVING TIME	⏳ FASTEST SOLVING TIME

Question 12 of 30

```
int area(double radius)
{
  return PI*radius*radius;
}
```

Which of the following is always true about the function area?

- **A.** It returns the area of a circle within the limits of double precision.
- **B.** It returns the area of a circle within the limits of the constant PI
- **C.** It returns the area of a circle within the limits of precision of double, or the constant PI, whichever is lower.
- ✔ **D.** None of the above.

Explanation :

No explanation provided

Question Analytics

64 USERS ()	10 USERS ()	54 USERS ()	15.62 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

21.37 SECS	2.6 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 13 of 30

What does this function compute for positive n?

```
function   f(int n)
{
  if (n eq.ls 1)
  { return 1 }
  else
  { return f(n1)/f(n1) + n }
}
```

- **A.** 1 + n
- **B.** 1 + 2 + 3 + ... + n
- ✓ **C.** 1 + n, if n > 1, 1 otherwise
- **D.** None of the above

Explanation :

No explanation provided

Question Analytics

62 USERS ()	27 USERS ()	35 USERS ()	43.55 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

30.09 SECS	2.7 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 14 of 30

Which of these is not a data type?

- **A.** integer
- **B.** character
- **C.** boolean

D. array

Explanation :

No explanation provided

Question Analytics

71 USERS ()	58 USERS ()	13 USERS ()	81.69 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

9.77 SECS	2 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 15 of 30

The construct "if (condition) then A else B" is for which of the following purposes?

A. Decision Making

B. Iteration

C. Recursion

D. Object Oriented Programming

Explanation :

No explanation provided

Question Analytics

70 USERS ()	52 USERS ()	18 USERS ()	74.29 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

12.76 SECS	2.5 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 16 of 30

In a sential programming language, code statements are executed in which order?

A. All are executed simultaneously

B. From top to bottom

C. From bottom to top

D. None of these

Explanation :

No explanation provided

Question Analytics

69 USERS ()	40 USERS ()	29 USERS ()	57.97 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

13.16 SECS	4.1 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 17 of 30

A forloop is used for which of the following purposes?

- **A.** Decision Making
- ✔ **B.** Iteration
- **C.** Recursion
- **D.** None of these

Explanation :

No explanation provided

Question Analytics

68 USERS ()	48 USERS ()	20 USERS ()	70.59 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

10.49 SECS	1.4 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 18 of 30

There are two loops which are nested. This implies which one of the following?

- **A.** Two loop, one after the other
- ✔ **B.** Two loops, one inside the others
- **C.** One loop with two different iteration counts
- **D.** Two loops with the same iteration count

Explanation :

No explanation provided

Question Analytics

71 USERS ()	50 USERS ()	21 USERS ()	70.42 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

18.13 SECS	3.7 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 19 of 30

How will 47 be stored as an unsigned 8bit binary number?

- **A.** 10111101
- ✔ **B.** 00101111
- **C.** 10111000
- **D.** 00101101

Explanation :

No explanation provided

Question Analytics

70 USERS ()	44 USERS ()	26 USERS ()	62.86 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

37.71 SECS	3.1 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 20 of 30

An integer X is saved as an unsigned 8bit number, 00001011.What is X?

- **A.** 22
- ✔ **B.** 11
- **C.** 10
- **D.** None of these

Explanation :

No explanation provided

Question Analytics

70 USERS ()	52 USERS ()	18 USERS ()	74.29 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

19.85 SECS	1.3 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 21 of 30

variable cannot be used...

- **A.** Before it is declared
- **B.** After it is declared
- **C.** In the function it is declared in
- **D.** Can always be used

Explanation :

No explanation provided

Question Analytics

71 USERS ()	54 USERS ()	17 USERS ()	76.06 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

13 SECS	0.9 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 22 of 30

What is implied by the argument of a function?

- **A.** The variables passed to it when it is called
- **B.** The value it returns on execution
- **C.** The execution code inside it
- **D.** Its return type

Explanation :

No explanation provided

Question Analytics

67 USERS ()	48 USERS ()	19 USERS ()	71.64 %

ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

15.17 SECS	0.0 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 23 of 30

Which of the following is true about comments?

- **A.** They are executed only once.
- ✓ **B.** They are not executed
- **C.** A good program does not contain them
- **D.** They increase program execution time.

Explanation :

No explanation provided

Question Analytics

72 USERS ()	54 USERS ()	18 USERS ()	75.0 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

13.28 SECS	2.2 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 24 of 30

Neelam wants to share her code with a colleague, who may modify it. Thus she wants to include the date of the program creation, the author and other information with the program. What component should she use?

- **A.** Header files
- **B.** Iteration
- ✓ **C.** Comments
- **D.** Preprocessor directive

Explanation :

No explanation provided

Question Analytics

67 USERS ()	43 USERS ()	24 USERS ()	64.18 %

ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

21.74 SECS	2.9 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 25 of 30

Shashi writes a program in C++ and passes it on to Pankaj. Pankaj does some indentation in some statements of the code. What will this lead to?

- **A.** Faster Execution
- **B.** Lower memory req.rement
- **C.** Correction of errors
- ✔ **D.** Better readability

Explanation :

No explanation provided

Question Analytics

68 USERS ()	35 USERS ()	33 USERS ()	51.47 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

21.47 SECS	3.4 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 26 of 30

Zenab and Shashi independently write a program to find the the mass of one mole of water, which includes mass of hydrogen and oxygen. Zenab defines the variables:

```
integer hydrogen, oxygen, water // Code A
```

while Shashi defines the three q.ntities as:

```
integer a, b, c   // Code B
```

Which is a better programming practice and why?

- **A.** Code B is better because variable names are shorter
- ✔ **B.** Code A is better because the variable names are understandable and non-confusing
- **C.** Code A will run correctly, while Code B will give an error.
- **D.** Code B will run correctly, while Code A will give an error.

Explanation :

No explanation provided

Question Analytics

63 USERS ()	41 USERS ()	22 USERS ()	65.08 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

25.66 SECS	3.2 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 27 of 30

For solving a problem, which of these is the first step in developing a working program for it?

- **A.** Writing the program in the programming language
- ✓ **B.** Writing a step by step algorithm to
- **C.** Compiling the libraries req.red.
- **D.** Code debugging solve the problem.

Explanation :

No explanation provided

Question Analytics

66 USERS ()	48 USERS ()	18 USERS ()	72.73 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

19.48 SECS	1.3 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 28 of 30

A robust program has which one of the following features?

- **A.** It runs correctly on some inputs
- **B.** It is robust to hardware damage
- ✓ **C.** It can handle incorrect input data or data types.
- **D.** None of these

Explanation :

No explanation provided

Question Analytics

68 USERS ()	36 USERS ()	32 USERS ()	52.94 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

15.61 SECS	0.0 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 29 of 30

Tarun wants to write a code to divide two numbers. He wants to warn the user and terminate the program if he or she enters 0 as the divisor. Which programming construct can he use to do this?

A. Iteration

✔ **B.** Decision-making

C. Recursion

D. None of these

Explanation :

No explanation provided

Question Analytics

66 USERS ()	44 USERS ()	22 USERS ()	66.67 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

21.11 SECS	2.2 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME

Question 30 of 30

To solve a problem, it is broken in to a sence of smaller subproblems, till a stage that the sub-problem can be easily solved. What is this design approach called?

✔ **A.** Topdown Approach

B. BottomUp Approach

C. Procedural Programming

D. None of these

Explanation :

No explanation provided

Question Analytics

66 USERS ()	23 USERS ()	43 USERS ()	34.85 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	ACCURACY

17.07 SECS	1.1 SECS
AVG. SOLVING TIME	FASTEST SOLVING TIME