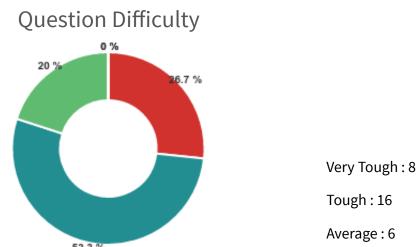
AMCAT Computer Programming Test 1 Report!

188 users have taken the test till now.

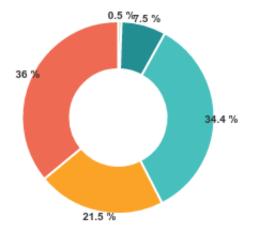
28/30
Highest Marks
0.0/30
Lowest Marks
9.2/30
Avg. Marks
20 m 19.61 s
Avg. Time Spent
43.03%

Avg. Accuracy



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: 1

Good: 14

Average: 64

Poor:40

Very Poor: 67

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

Topper's Score	28
Average Score	9.2

Overall

Computer Programming

Accuracy Comparision

Topper's Accuracy	93.33 %
Average Accuracy	43.03 %

② Time Comparision

Topper's Time	18 m 46 s
Average Time	20 m 19.61 s





Manju malik (/namratamalik1994/)

Rank: 1 Score: 28/30



Ritam Singha (/ritamraiganj/)

Rank: 2 Score: 26/30



Avinash Saini (/avinashsaini1994/)

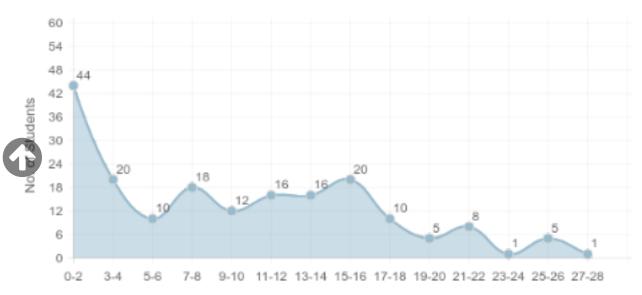
Rank: 3 Score: 26/30



Ritam Singha (/babai141992/)

Rank: 4 Score: 25/30

Marks vs No. of Students

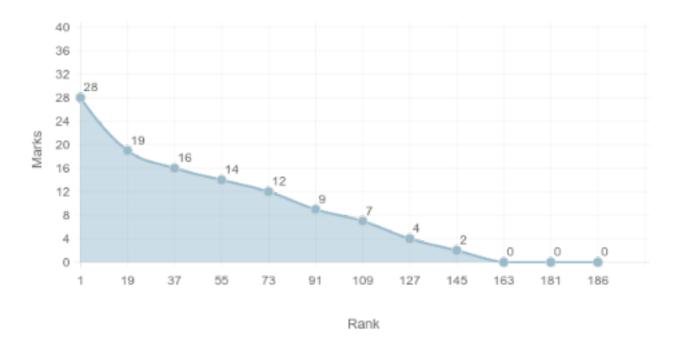


Marks

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

There is a new datatype which can take as values natural numbers between (and including) 0 and 25. How many minimum bits are required to store this datatype.

- **A.** 4
- **⊘ B.** 5
 - **C.** 1
 - **D.** 3

Explanation:

No explanation provided

Question Analytics

127 USERS () 68 USERS () 59 USERS () 53.54 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY

22.25 SECS

1.5 SECS

PAYG. SOLVING TIME ☐ FASTEST SOLVING TIME

Question 2 of 30

A data type is stored as an 6 bit signed integer. Which of the following cannot be represented by this data type?

- **A.** 12
- **B.** 0
- **⊘ C.** 32
 - **D.** 18

Explanation:

No explanation provided

Question Analytics



Question 3 of 30

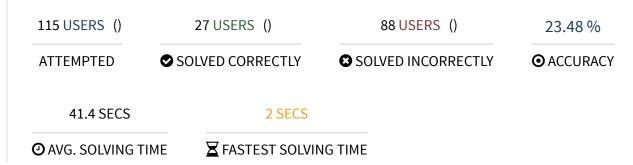
A language has 28 different letters in total. Each word in the language is composed of maximum 7 letters. You want to create a datatype to store a word of this language. You decide to store the word as an array of letters. How many bits will you assign to the data-type to be able to store all kinds of words of the language.

- **A.** 7
- **❷ B.** 35
 - **C.** 28
 - **D.** 196

Explanation:

No explanation provided

Question Analytics



Question 4 of 30 A 10 bit unsigned integer has the following range: **A.** 0 to 1000 **B.** 0 to 1024 **C.** 1 to 1025 **♥ D.** 0 to 1023 **Explanation:** No explanation provided **Question Analytics** 128 USERS () 66 USERS () 62 USERS () 51.56% SOLVED CORRECTLY ATTEMPTED SOLVED INCORRECTLY • ACCURACY 12.78 SECS **3.4 SECS** ② AVG. SOLVING TIME **▼** FASTEST SOLVING TIME Question 5 of 30 Rajni wants to create a datatype for the number of books in her book case. Her shelf can accommodate a maximum of 75 books. She allocates 7 bits to the datatype. Later another shelf is

added to her bookcase. She realizes that she can still use the same datatype for storing the number of books in her bookcase. What is the maximum possible capacity of her new added shelf?

- **⊘ A.** 52
 - **B.** 127
 - **C.** 53
 - **D.** 75

Explanation:

No explanation provided

Question Analytics

110 USERS ()	30 USERS ()	80 USERS ()	27.27 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	⊙ ACCURACY
33.48 SECS	2.2 SECS		

Question 6 of 30

A new language has 15 possible letters, 8 different kinds of punctuation marks and a blank character. Rahul wants to create two data types, first one which could store the letters of the language and a second one which could store any character in the language. The number of bits required to store these two datatypes will respectively be:

- **A.** 3 and 4
- **B.** 4 and 3
- **♥ C.** 4 and 5
 - **D.** 3 and 5

Explanation:

No explanation provided

Question Analytics



Question 7 of 30

Parul takes as input two numbers: a and b. a and b can take integer values between 0 and 255. She stores a, b and c as 1byte data type. She writes the following code statement to process a and b and put the result in c.

$$c = a + 2*b$$

To her surprise her program gives the right output with some input values of a and b, while gives an erroneous answer for others. For which of the following inputs will it give a wrong answer?

$$\triangle$$
 A. a = 10 b = 200

B.
$$a = 200 b = 10$$

C.
$$a = 50 b = 100$$

D.
$$a = 100 b = 50$$

Explanation:

No explanation provided

Question Analytics

109 USERS () 65 USERS () 44 USERS () 59.63 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY ACCURACY

41.09 SECS 1.9 SECS

② AVG. SOLVING TIME ☐ FASTEST SOLVING TIME

Question 8 of 30

Prashant takes as input 2 integer numbers, a and b, whose value can be between 0 and 127. He stores them as 7 bit numbers. He writes the following code to process these numbers to produce a third number c.

$$c = a - b$$

In how many minimum bits should Prashant store c?

- A. 6 bits
- B. 7 bits
- **♥ C.** 8 bits
 - **D.** 9 bits

Explanation:

No explanation provided

Question Analytics

ATTEMPTED 32 USERS () 85 USERS () 27.35 %

SOLVED CORRECTLY SOLVED INCORRECTLY

OACCURACY

25.57 SECS 2.3 SECS

② AVG. SOLVING TIME ☐ FASTEST SOLVING TIME

Question 9 of 30

Ankita takes as input 2 integer numbers, a and b, whose value can be between 0 and 31. He stores them as 5 bit numbers. He writes the following code to process these numbers to produce a third number c.

$$c = 2*(a - b)$$

In how many minimum bits should Ankita store c?

- A. 6 bits
- **❷ B.** 7 bits
 - C. 8 bits
 - **D.** 9 bits

Explanation:

No explanation provided

Question Analytics

115 USERS () 25 USERS () 90 USERS () 21.74 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY ACCURACY

35.72 SECS 1.6 SECS

② AVG. SOLVING TIME ☐ FASTEST SOLVING TIME

Question 10 of 30

A character in new programming language is stored in 2 bytes. A string is represented as an array of characters. A word is stored as a string. Each byte in the memory has an address. The word "Mahatma Gandhi" is stored in the memory with starting address 456. The letter 'd' will be at which memory address?

- **A.** 468
- **B.** 480
- **♥ C.** 478
 - **D.** 467

Explanation:

No explanation provided

Question Analytics

120 USERS () 55 USERS () 65 USERS () 45.83 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY ACCURACY

37.13 SECS 2 SECS

② AVG. SOLVING TIME ☐ FASTEST SOLVING TIME

Question 11 of 30

Stuti is making a questionnaire of Truefalse questions. She wants to define a datatype which stores the response of the candidate for the question. What is the most suited data type for this purpose?

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

Explanation:

No explanation provided

Question Analytics

136 USERS ()	109 USERS ()	27 USERS ()	80.15 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	⊙ ACCURACY
16.93 SECS	1.7 SECS		
② AVG. SOLVING T	IME X FASTEST SOLVIN	IG TIME	

Question 12 of 30

A pseudocode is used. Assume that when two datatypes are processed through an operator, the answer maintains the same datatype as the input datatypes. Assume that all datatypes have enough range to accommodate any number. If two different datatypes are operated on, the result assumes the more expressive datatype. What will be the output of the following pseudocode statements:

```
integer a = 456,    b, c, d = 10
b = a/d
c = a    b
print c
```

- **A.** 410
- **B.** 410.4
- **C.** 411.4
- **⊘ D.** 411

Explanation:

No explanation provided

Question Analytics

100 USERS ()	41 USERS ()	59 USERS ()	41.0 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	• ACCURACY

45.66 SECS	2.6 SECS	
• AVG. SOLVING TIME	■ FASTEST SOLVING TIME	

Question 13 of 30

A pseudocode is used. Assume that when two datatypes are processed through an operator, the answer maintains the same datatype as the input datatypes. Assume that all datatypes have enough range to accommodate any number. If two different datatypes are operated on, the result assumes the more expressive datatype.

// in pseudo code refers to comment

What will be the output of the following pseudocode statements:

```
integer a = 984,    b, c, d =10
print remainder(a,d) // remainder when a is divided by d
a = a/d
print remainder(a,d) // remainder when a is divided by d
```

- **⊘ A.** 48
 - B. Error
 - **C.** 84
 - **D.** 44

Explanation:

No explanation provided

Question Analytics

```
127 USERS () 49 USERS () 78 USERS () 38.58 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY

48.16 SECS

2.3 SECS

▼ AVG. SOLVING TIME    ▼ FASTEST SOLVING TIME
```

Question 14 of 30

Assume the following precedence (high to low). Operators in the same row have the same precedence:

```
(.)
*/
+
AND
```

OR

For operators with equal precedence, the precedence is from lefttoright in expression. What will be the output of the following code statements?

```
integer a = 50, b = 25, c = 0
print (a > 45 OR b > 50 AND c > 10)
```

- **⊘** A. 1
 - **B.** 0
 - **C.** -1
 - **D.** 10

Explanation:

No explanation provided

Question Analytics

123 USERS ()	67 USERS ()	56 USERS ()	54.47 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	• ACCURACY

33.57 SECS 3.1 SECS

② AVG. SOLVING TIME ☐ FASTEST SOLVING TIME

Question 15 of 30

Assume the following precedence (high to low). Operators in the same row have the same precedence:

(.)

* /

AND

OR

For operators with equal precedence, the precedence is from lefttoright in expression. What will be the output of the following code statements?

```
integer a = 50, b = 25, c = 5
print a * b / c + c
```

- **A.** 120
- **B.** 125
- **♥ C.** 255
 - **D.** 250

Explanation:

No explanation provided

Question Analytics

124 USERS () 89 USERS () 35 USERS

124 USERS () 89 USERS () 35 USERS () 71.77 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY

O ACCURACY

30.96 SECS 2 SECS

② AVG. SOLVING TIME ☐ FASTEST SOLVING TIME

Question 16 of 30

Assume the following precedence (high to low). Operators in the same row have the same precedence:

(.)

* /

AND

OR

For operators with equal precedence, the precedence is from lefttoright in expression. What will be the output of the following code statements?

- **⊘ A.** 65
 - **B.** 60
 - C. Error
 - **D.** 70

Explanation:

No explanation provided

Question Analytics

123 USERS () 88 USERS () 35 USERS () 71.54 %

ATTEMPTED

SOLVED CORRECTLY

SOLVED INCORRECTLY

OACCURACY

26.07 SECS 6.6 SECS

② AVG. SOLVING TIME **▼** FASTEST SOLVING TIME

Assume the following precedence (high to low). Operators in the same row have the same precedence: (.) * / + AND OR For operators with equal precedence, the precedence is from leftt or ight in expression. integer a = 10, b = 35, c = 5Comment about the output of the two statements? print a * b + c / dprint c / d + a * bA. Differ due to left to right precedence **B.** Differ by 10 C. Differ by 20 **D.** Same **Explanation:** No explanation provided **Question Analytics** 110 USERS () 69 USERS () 41 USERS () 62.73 % SOLVED CORRECTLY SOLVED INCORRECTLY • ACCURACY ATTEMPTED 41.44 SECS **1.6 SECS** ② AVG. SOLVING TIME **▼** FASTEST SOLVING TIME Question 18 of 30 Assume the following precedence (high to low). Operators in the same row have the same precedence: (.) * / + **AND** OR For operators with equal precedence, the precedence is from lefttoright in expression.integer a = 40, b = 35, c = 20, d = 10Comment about the output of the following two statements: print a * b / c - d print a * b / (c - d)

- **♦ A.** Differ by 80
 - **B.** Same
 - **C.** Differ by 50
 - **D.** Differ by 160

Explanation:

No explanation provided

Question Analytics



Question 19 of 30

② AVG. SOLVING TIME

Assume the following precedence (high to low). Operators in the same row have the same precedence:

▼ FASTEST SOLVING TIME

(.) * /

+

AND

OR

For operators with equal precedence, the precedence is from left toright in expression. $\label{eq:condition}$

integer a = 60, b = 35, c = 30

What will be the output of the following two statements:

```
print ( a > 45 OR b > 50 AND c > 10 )
print ( ( a > 45 OR b > 50 ) AND c > 10 )
```

- **A.** 0 and 1
- **B.** 0 and 0
- **C.** 1 and 1
- **D.** 1 and 0

Explanation:

No explanation provided

Question Analytics

117 USERS () 18 USERS () 99 USERS () 15.38 %

ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	⊙ ACCURACY
42.12 SECS	2 SECS		
② AVG. SOLVING TII	ME	IG TIME	

Question 20 of 30

A pseudocode is used. Assume that when two datatypes are processed through an operator, the answer maintains the same datatype as the input datatypes. Assume that all datatypes have enough range to accommodate any number. If two different datatypes are operated on, the result assumes the more expressive datatype.

// in pseudo code refers to comment

What will be the output of the following pseudocode statements:

```
integer a = 984, b=10
//float is a datatype to store real numbers.
float c
c = a / b
print c
```

- **A.** 984
- B. Error
- **⊘ C.** 98
 - **D.** 98.4

Explanation:

No explanation provided

Question Analytics



Question 21 of 30

A pseudocode is used. Assume that when two datatypes are processed through an operator, the answer maintains the same datatype as the input datatypes. Assume that all datatypes have enough range to accommodate any number. If two different datatypes are operated on, the result assumes the more expressive datatype.

// in pseudo code refers to comment

What will be the output of the following pseudocode statements:

```
integer a = 984
//float is a datatype to store rational numbers.
float b= 10, c
c = a / b
print c
```

- **A.** 984
- B. Error
- **♥ C.** 98.4
 - **D.** 98

Explanation:

No explanation provided

Question Analytics

```
125 USERS () 84 USERS () 41 USERS () 67.2 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY

27.61 SECS

3.3 SECS

→ AVG. SOLVING TIME FASTEST SOLVING TIME
```

Question 22 of 30

Smriti wants to make a program to print the sum of square of the first 5 whole numbers (0...4). She writes the following program:

```
integer i = 0 // statement 1
integer sum = 0 // statement 2
while ( i < 5 ) // statement 3
{
   sum = i*i // statement 4
   i = i + 1 // statement 5
}
print sum // statement 6</pre>
```

Is her program correct? If not, which statement will you modify to correct it?

- **A.** No error, the program is correct.
- **B.** Statement 1
- C. Statement 4
 - **D.** statement 6

Explanation:

No explanation provided

Question Analytics

127 USERS () 68 USERS () 59 USERS () 53.54 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY

36.08 SECS 1.7 SECS

→ AVG. SOLVING TIME FASTEST SOLVING TIME

Question 23 of 30

Shashi wants to make a program to print the sum of the first 10 multiples of 5. She writes the following program, where statement 5 is missing:

```
integer i = 0
integer sum = 0
while ( i <= 50 ) {
   sum = sum + i
   MISSING STATEMENT 5
}
print sum</pre>
```

Which of the following will you use for statement 5?

- **A.** i = 5
- **B.** i = 5 * i
- **C.** i = i + 1
- **D.** i = i + 5

Explanation:

No explanation provided

Question Analytics

130 USERS ()	78 USERS ()	52 USERS ()	60.0 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	⊙ ACCURACY
41.48 SECS	2.2 SECS		

▼ FASTEST SOLVING TIME

Question 24 of 30

② AVG. SOLVING TIME

Shantanu wants to make a program to print the sum of the first 7 multiples of 6. He writes the

following program:

```
integer i = 0 // statement 1
integer sum // statement 2
while ( i <= 42 ) // statement 3
{
   sum = sum + i // statement 4
   i = i + 6;
}
print sum // statement 6</pre>
```

Does this program have an error? If yes, which one statement will you modify to correct the program?

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

Explanation:

No explanation provided

Question Analytics

122 USERS ()	72 USERS ()	50 USERS ()	59.02 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	• ACCURACY
34.14 SECS	4 SECS		
② AVG. SOLVING T	IME	NG TIME	

Question 25 of 30

Sharmili wants to make a program to print the sum of all perfect cubes, where the value of the cubes go from 0 to 100. She writes the following program:

Does this program have an error? If yes, which one statement will you modify to correct the program?

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

Explanation:

No explanation provided

Question Analytics

120 USERS () 35 USERS () 29.17 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY

1 M 2.2 S

13.6 SECS

→ AVG. SOLVING TIME FASTEST SOLVING TIME

Question 26 of 30

Bhavya wants to make a program to print the sum of all perfect squares, where the value of the squares go from 0 to 50. She writes the following program:

```
integer i = 1, a // statement 1
integer sum = 0
while ( a < 50 ) // statement 2
{
   sum = sum + a // statement 3
   i = i + 1
   a = ( i * i ); // statement 4
}
print sum</pre>
```

Does this program have an error? If yes, which one statement will you modify to correct the program?

- **⊘ A.** Statement 1
 - B. Statement 2
 - C. Statement 3
 - D. Statement 4

Explanation:

No explanation provided

Question Analytics

121 USERS () 56 USERS () 65 USERS () 46.28 %

ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY ACCURACY

35.73 SECS

1.7 SECS

AVG. SOLVING TIME FASTEST SOLVING TIME

Question 27 of 30

Vijay wants to print the following pattern on the screen:

2

24

246

2468

He writes the following program:

```
integer i = 1, j=2 // statement 1
while ( i <= 4 ) // statement 2
{
    j = 2;
    while ( j <= ? ) // Statement 3
    {
        print j
        print blank space
        j = j + 2
    }
    print endofline \takes the cursor to the next line
    i = i + 1
}</pre>
```

What is the value of? in statement 3::

- **A.** 8
- **B.** i
- **⊘ C.** 2*i
 - **D.** 4

Explanation:

No explanation provided

Question Analytics

127 USERS ()	65 USERS ()	62 USERS ()	51.18 %	
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	• ACCURACY	

41.56 SECS 5.3 SECS

② AVG. SOLVING TIME ☐ FASTEST SOLVING TIME

Question 28 of 30

Shravanti writes the following program:

```
integer i = 0, j
while (i < 2)
 j = 0;
 while ( j \le 3*i )
   print j
   print blank space
   j = j + 3
 print endofline \takes the cursor to the next line
  i = i + 1
}
```

What will be the output of the program?

A.

0

03

В.

0

3 036

C. 0

036

0369

D. 036

0369

036912

Explanation:

No explanation provided

Question Analytics

119 USERS () 57 USERS () 62 USERS () 47.9 % ATTEMPTED SOLVED CORRECTLY SOLVED INCORRECTLY ACCURACY

1 M 0.29 S

4.2 SECS

② AVG. SOLVING TIME ☐ FASTEST SOLVING TIME

Vijay wants to print the following pattern on the screen:

1 12

123

He writes the following program:

```
integer i = 1 // statement 1
while ( i <= 3 )
{
  int j // Statement 2
  while ( j <= i ) // Statement 3
  {
    print j
    print blank space
    j = j + 1 // Statement 4
  }
  print endofline \takes the cursor to the next line
    i = i + 1
}</pre>
```

Will this program function correctly? If not which one statement will you modify to make the program function correctly?

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

Explanation:

No explanation provided

Question Analytics

120 USERS ()	72 USERS ()	48 USERS ()	60.0 %
ATTEMPTED	SOLVED CORRECTLY	SOLVED INCORRECTLY	⊙ ACCURACY
37.59 SECS	3.4 SECS		
② AVG. SOLVING TI	ME	NG TIME	

Question 30 of 30

Charu writes the following program:

```
integer i = 1, j, a
while ( i \le 4 )
  j = 1;
  a = 0;
  while ( a \leq 5*i )
    a = 2^{j};
   print a
    print blank space
   j = j + 1
  print endofline \takes the cursor to the next line
  i = i + 1
```

What will be the output of the program?

A.

2

24

248

24816

B. 2

4

248

24816

2481632

⊘ C. 24

248

248

24816

D. 2

24

24

24816

Explanation:

No explanation provided

Question Analytics

117 USERS () 46 USERS () 71 USERS () 39.32 % ATTEMPTED

SOLVED CORRECTLY

SOLVED INCORRECTLY ACCURACY

1 M 14.04 S

4.9 SECS

② AVG. SOLVING TIME ☐ FASTEST SOLVING TIME