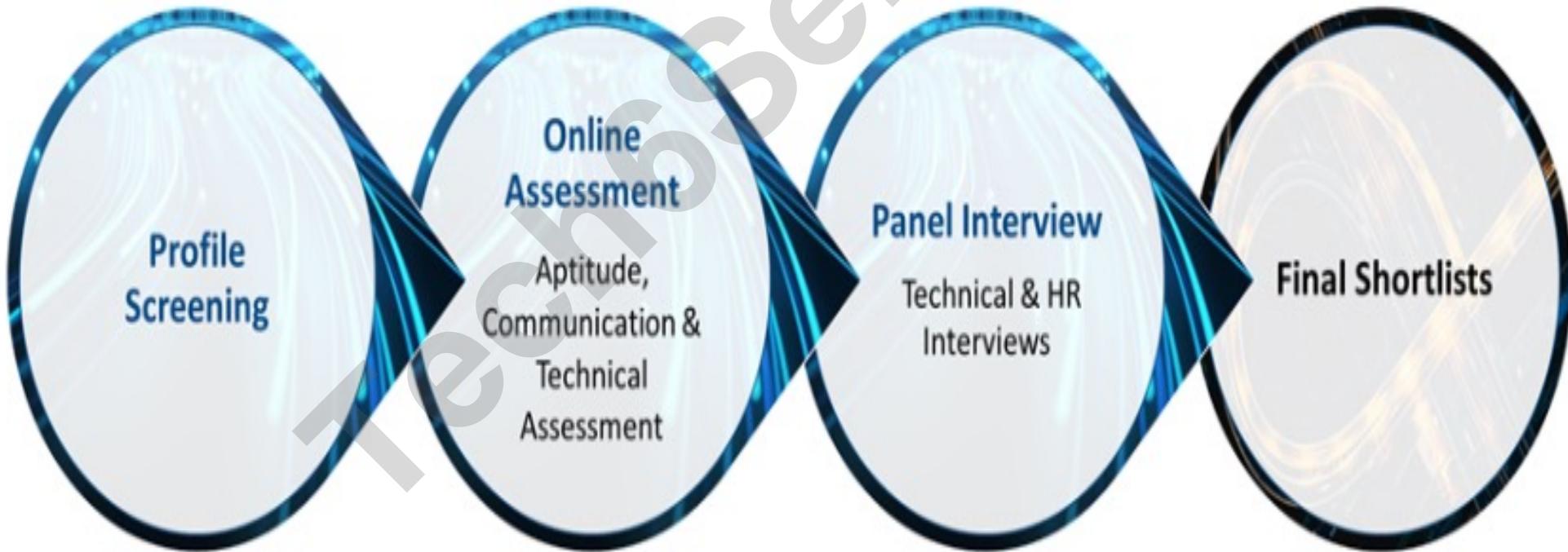




Designation: Graduate Engineer Trainee

Compensation: INR 4,05,233 per annum

Hiring & Selection Process:



Schedule of Test:

1. Date: September 8, 2024
2. Test Window: Link will be active from September 8, 2024, from 00:01 Hours to 23:59 Hours (Test link will remain open for continuous 24 hours)
3. Test Composition: 120 Minutes

Module	English Comprehension	Logical Ability	Quantitative Ability	Computer Programming	Computer Science	Spoken English
Duration (in mins)	15 mins	15 mins	15 mins	35 mins	20 mins	20 mins
No of Questions	12	12	12	25	20	7 Sections

4. Note: The test link & guidelines will be sent to the eligible candidates' registered e-mail IDs from our assessment platform partner SHL
(through the mail id - talentcentral@shl.com) by September 7, 2024

7. Documents to be kept ready for the Online test - To be uploaded during the assessment process on the test platform. Note: files to be uploaded Only in pdf/jpeg/doc formats having maximum size of 2 MB; candidates should not upload password protected files.

- Eligibility Declaration Form (attached)
- Updated Resume
- College ID card

Eligibility Criteria for T School Hiring – 2025 Batch

Qualification	B.E/ BTech/ ME/ MTech (All branches of engineering) /MCA/ 5 Yrs Integrated CS & IT engineering branches only (all education in full-time/regular courses)
Branches	All branches of engineering
Academic Gap	Not more than 2 years academic gap allowed. (SSC/HSC/Diploma/UG/PG)
SSC, HSC Percentages, Diploma (if applicable), Graduation Percentage/CGPA	<p>Consistent academic records of 60% in 10th, 12th, Diploma (as applicable), UG and PG courses (aggregate of all semesters & subjects)</p> <p><u>NOTE:</u></p> <ol style="list-style-type: none"> Appropriate CGPA to percentage conversion to be considered as per the respective university norms. The scores of the Main or improvement exam would be considered as final. For candidates who have pursued both HSC and Diploma, marks scored in the Diploma course will be considered.
Re-attempts/ATKTs /Backlogs/Arrears (Diploma, Graduation)	<ol style="list-style-type: none"> Initial results (% scores) declared would be considered for students awaiting re-evaluation results. At the time of recruitment process, there must be no standing arrears in current education
Nature of Course	All Full-Time Courses Only
Year of Passing	2025 Pass Outs Only
Citizenship	Should be an Indian National
Your College/Institution MUST	UGC / AICTE / State Board Approved ONLY
Pre-Employment Verification	Not been involved in any court proceedings and/or convicted for any offence

Self-Declaration:

1. I hereby declare that I meet ALL the eligibility criteria exactly as stated above.
2. I am aware that I may be subjected to immediate action by the company at any time during or after the Interview/Selection/Joining if found hiding any information/producing incorrect information or not meeting all the criteria mentioned above.
3. As a future IT professional, I am flexible towards working from any of LTIMindtree's development centers across the country, flexible work durations/time, training and working in multiple emerging skills & domain.
4. I confirm that I have NOT appeared for any LTIMindtree interview process anywhere in the past 6 months. (If found so, LTIMindtree may take immediate action and cancel the candidature at ANY stage)

Signature: _____ **Name:** _____

Mobile No: _____

College Name: _____

Tech 6 Sense : _____

12 Questions in 15 Minutes	Complete
Logical Ability	Complete
12 Questions in 15 Minutes	Complete
Quantitative Ability (Advanced)	Complete
12 Questions in 15 Minutes	Complete
Computer Programming Multi-choice test that measures the knowledge of basic programming constructs, data structures, algorithms and object oriented programming concepts.	Upcoming
25 Questions in 35 Minutes	Upcoming
Computer Science 20 Questions in 20 Minutes	Later
SVAR Conversational - Spoken English 7 Sections	Later

Logical Ability

Choose the correct option.

Aaron was riding his bike. He rode 50 yards south and took a left turn to ride another 70 yards. After that, he took another left turn and rode 50 yards. Finally, he turned right to ride 60 more yards. How far and in which direction is he from the starting point?

Options

120 yards, West

110 yards, East

110 yards, West

130 yards, East

Refer to the given terms. A pattern defines the relationship between the first pair. Determine the relationship and identify the missing term of the second pair, such that the pairs are analogous.

POLICY : NPJJAZ :: INSURANCE :

PASSAGE

The delivery charges for goods bought from ABC Company are decided according to the following procedure. The customers

1. are divided into two categories:
 - a. those who have a sales region code of 10 or above
 - b. those who have a sales region code of less than 10;
2. must have bought goods worth \$500 or more in the previous month;
3. must not have dealership of any other similar company;
4. must not have been provided bulk discount before;
5. must have been provided a special discount of 5% or less than that in the previous dealings;
6. must have regularly ordered for more than three years.

However, if the customer

- a. fulfills all the conditions except (2), and if the sales region code is less than 10, delivery charges of \$10 would be levied. Delivery charges of \$8 would be levied for a code more than 10;
- b. fulfills all the conditions except (3), and if the sales region code is less than 10, delivery charges of \$5 would be levied. Delivery charges of \$12 would be levied for a code more than 10;
- c. does not fulfill two or more of the conditions stated above, then s/he would have to pay delivery charges of \$30 regardless of the sales region code.

Does the customer need to pay delivery charges? (The case is presented on July 12, 2011.)

There are two cases based on the given set of conditions. Take a decision for both the cases and choose the correct option for each.

Jacob is a customer whose sales region code is 14. He bought goods worth \$150 from ABC Company in June. He is not a dealer for any other similar company. He has never been provided any bulk discount or special discount.

OPTIONS

The customer need not pay any delivery charges

The customer would have to pay \$30 as delivery charges

The customer would have to pay \$10 as delivery charges

The customer would have to pay \$8 as delivery charges

Insufficient data



Analyze the given word pattern and choose the correct option.

If WORD is coded as 9753, then what is the code for DOOR?

Options

3579

3559

9357

3775

SHL

← → X ⌂ | ⓘ | ⌂

SHL

Refer to the given terms. A pattern defines the relation
Determine the relationship and identify the missing terms.
pairs are analogous.

985 : 874 :: 763 :

> denotes "equal to"
"=" denotes "not less than"
"@" denotes "not equal to"
#" denotes "less than"
"**" denotes "not greater than"

Which of the two conclusions I and II is/are definitely true based on the information provided?

Statements:

P>S, S@T, P#R

Conclusions:

I. S%R

II. P@T

Only conclusion I is true

Only conclusion II is true

Neither conclusion I nor II is true

Both conclusions I and II are true

Refer to the given terms. A pattern defines the relationship between the first two terms. Determine the relationship and identify the missing term of the second pair, such that both the pairs are analogous.

CEGT : JNP = QSLW :

18:45

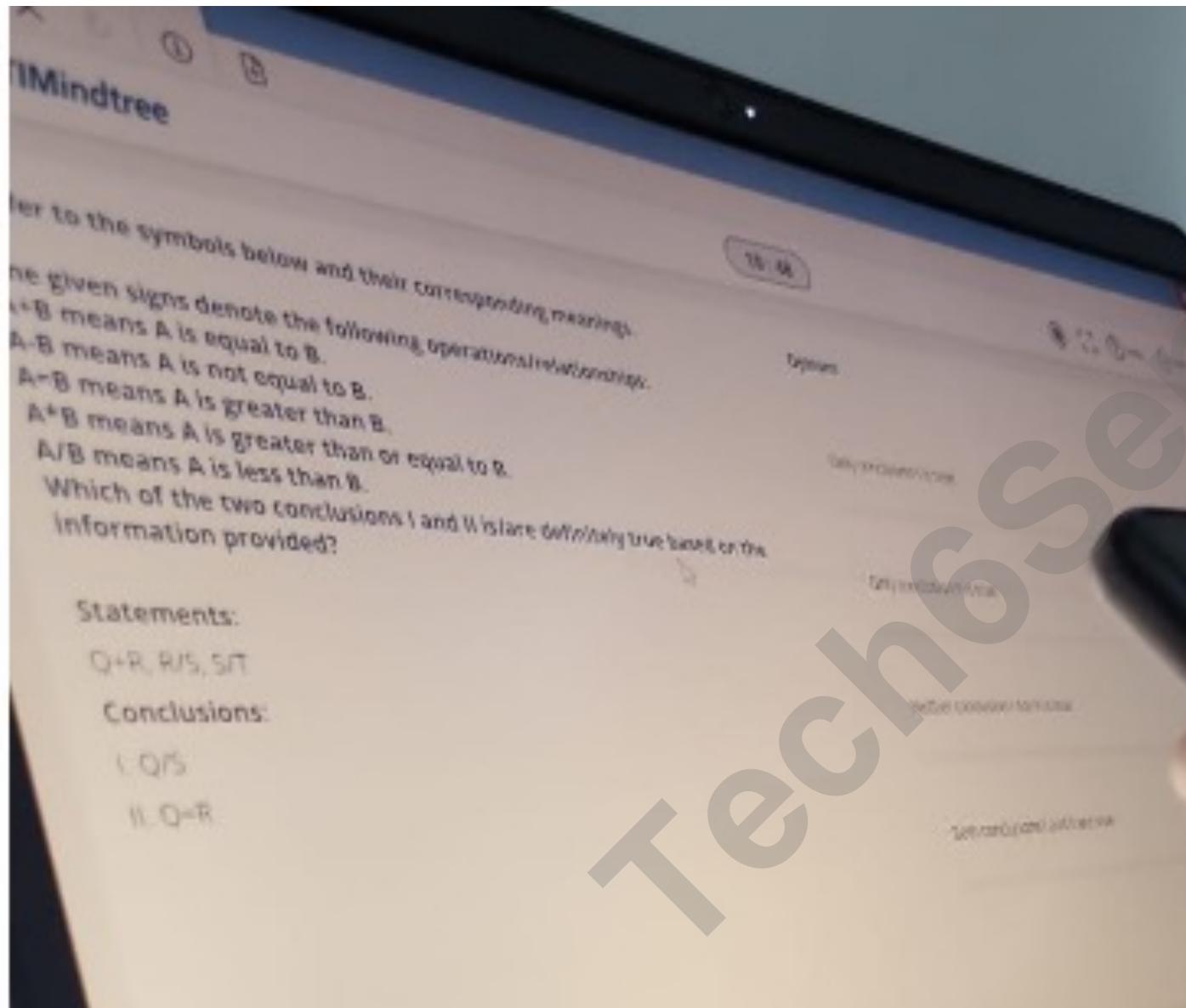
Options

HOME

PREV

NEXT

UTM



Refer to the given terms. A pattern defines the relationship between the first two terms. Determine the relationship and identify the missing term of the second pair, such that both the pairs are analogous.

Options

46 : 64 :: 82 :

103

104

48

42

Refer to the given terms. A pattern defines the relationship between the first two terms. Determine the relationship and identify the missing term of the second pair, such that both the pairs are analogous.

AGD : EKH :: IOL :

Options

MUP

NTR

MSP

NTO

Analyze the given word pattern and choose the correct option.

If STUMP is coded as PQRJM, then what is the code for RPTCH?

Options

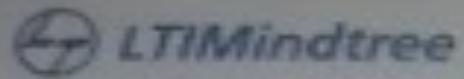
MFQZE

QJUDI

MEQAE

RKVEK

SHL



11 : 59

Analyze the given word pattern and choose the correct option.

Options

If RESULT is coded as SFTVMU, then what is the code for EYAM?

PWBO

DYZL

FYBN

DXZL

Choose the correct option.

A man moves 2 miles east, then 3 miles south and then 2 miles west. He then moves 2 miles toward the initial point from where he had started. In which direction is he from his initial position?

Options

East

South

West

North

Refer to the symbols below and their corresponding meanings.

Options

The given signs denote the following operations/relationships:

"%" denotes "greater than"

Only conclusion I is true

">" denotes "equal to"

"-=" denotes "not less than"

"@" denotes "not equal to"

"#" denotes "less than"

"*=" denotes "not greater than"

Which of the two conclusions I and II are definitely true based
on the information provided?

Only conclusion II is true

Statements:

A% B , $C=E$, $D*B$

Either conclusion I or II is true

Conclusions:

I. $A\#D$

II. $C*E$

Neither conclusion I nor II is true

The given question is followed by two statements I and II. Decide if the statements contain sufficient information to answer the question.

Options

Problem Question: I have four friends. What is my age?

Statement I alone

Statements:

I) Average of our ages is 85 years.

Statement II alone

II) All of us are of the same age.

Both statements together

The given question is followed by two statements I and II. Decide if the statements contain sufficient information to answer the question.

Problem Question: In which month does my birthday fall?

Statements:

- I) My birthday falls before October and after February.
- II) My birthday falls after April and before August.

PASSAGE

Solar Technology Company is organizing a conference for green organizations. The company's invitee list includes those companies that satisfy the following criteria:

1. Should have an Environment Clearance Certificate;
2. Should have developed at least three solar products;
3. Should have none of its products made from synthetic polymers;

The company should be invited for the conference

The company should not be invited for the conference

The case should be referred to the Chief Operating Officer

The case should be referred to the Director of the company

pending against it.

If a company satisfies all the criteria except

- a. criteria (2), but it has the third product in the testing phase, then the company's case should be referred to the Chief Operating Officer of the company;
- b. criteria (5), but it has a solar certification for its products. If from the Solar Corporation Inc., then the company's case should be referred to the Director of the company.

Should the company be invited to the conference?

Answer the following questions based on the given passage. Make a decision for both the cases and choose the correct option for each.

A US-based company sells batteries to its clients. The company has an Environmental Clearance Certificate. It currently produces two solar products, both of which are grade 'A' certified and do not make use of synthetic polymers in their production. The company has no legal case pending against it.

OPTIONS

The company should be invited for the conference

There are two cases based on the given set of conditions. Take a decision for both the cases and choose the correct option for each.

Leo Berbee Inc., a company with headquarters in Texas, sells different kinds of solar products to its customers. These include solar bulbs, solar cookers and solar water heaters. They are not made of synthetic polymers. The company has an Environment Clearance Certificate and its products are grade A certified. The company does not have any legal case pending against it.



OPTIONS

The company should be invited for the conference

The company should not be invited for the conference

The case should be referred to the Chief Operating Officer



The case should be referred to the Director of the company

Insufficient data

PASSAGE

The conditions to select students for the United States Hockey League (Junior) are as follows. The student should

1. be between 15-18 years of age and must have an authorization letter from the school's principal;
2. have played at least ten interschool matches;
3. have won at least five interschool matches;
4. have a recommendation letter from the school coach;
5. not have any record of misbehavior on the field, in the interschool matches played.

However, if a player satisfies all the criteria given above except

- a. criterion (3) but has experience of playing at least one international match, then his/her case should be referred to the Director of the league committee;
- b. criterion (1) but is 14 years of age and has a sports

3. have won at least five interschool matches;
4. have a recommendation letter from the school coach;
5. not have any record of misbehavior on the field, in the interschool matches played.

However, if a player satisfies all the criteria given above except
a. criterion (3) but has experience of playing at least one international match, then his/her case should be referred to the Director of the league committee;

- b. criterion (1) but is 14 years of age and has a sports excellence certificate, then his/her case should be referred to the Chairman of the league committee.

Should the given player be selected? (The case is presented on October 12, 2012. All dates are in mm.dd.yyyy format.)

There are two cases based on the given set of conditions. Take a decision for both the cases and choose the correct option for each.

Naomi Brown, a 16 year old hockey champion at St. Louis High School has applied to participate in the United States Hockey League (Junior). She has submitted the authorization letter from the principal and the recommendation letter from the school coach. Her team won four out of twelve interschool matches. One of these matches was against a team from Finland.

OPTIONS

LTI Mindtree

01 : 41

PASSAGE

The conditions to appoint a petroleum gas distributor for Georgia are as follows. The applicant should

1. be an American citizen;
2. be 21-50 years old as of September 5, 2008;
3. be at least a high school graduate or any other recognized equivalent;
4. be a resident of Georgia. He/she should have resided in Georgia for no fewer than 5 years immediately preceding the date of application;
5. have a family income of \$30,000 or less annually;
6. not have dealership of any oil company;
7. not have any close relative as a distributor of any oil company.

However,

8. restrictions related to annual income would not be applicable to applicants working in corporations owned or controlled by state departments. Such a case should be referred to the Managing Director;
9. for unemployed applicants who hold at least a Bachelor's degree, conditions (6) and (7) may be waived;
10. if an applicant is from a rural district but is not a resident of Georgia, the case may be referred to the Chairman.

Should the given applicant be selected? (The case is presented on February 1, 2009.)

There are two cases based on the given set of conditions and choose the correct option for each.

William Trevino, a 23 year old American citizen, works in state department. He holds a Bachelor's degree and has been working in Georgia for seven years. Neither he nor his wife are distributors or dealers for any oil company.

OPTIONS

The applicant should be selected

The applicant should not be selected

Insufficient data

The case should be referred to the Managing Director

The case should be referred to the Chairman



The given question is followed by two statements I and II. Decide if the statements contain sufficient information to answer the question.

Problem Question: Jessica is a Chemistry teacher. She forgot to bring her timetable and now wants to find out the day's schedule for Grade 11. She knows that there are four subjects taught - Physics, Chemistry, Mathematics and Biology - in four consecutive lectures of one hour each, starting from 9:00 a.m. At what time is the Chemistry class scheduled?

Statements:

- I) Mathematics class ended at 11:00 a.m., which was preceded by Biology.
- II) Physics was scheduled to be the last period.

Options

I alone is sufficient while II alone is not sufficient.

II alone is sufficient while I alone is not sufficient.

Either of the statements taken individually is sufficient to answer the problem question.

Neither I nor II is sufficient.

Both statements put together are sufficient to answer the problem question.

SUBMIT

PASSAGE

The conditions to select students for the United States Hockey League (junior) are as follows. The student should

1. be between 15-18 years of age and must have an authorization letter from the school's principal;
2. have played at least ten interschool matches;
3. have won at least five interschool matches;
4. have a recommendation letter from the school coach;
5. not have any record of misbehavior on the field, in the interschool matches played.

However, if a player satisfies all the criteria given above except

- a. criterion (3) but has experience of playing at least one international match, then his/her case should be referred to the Director of the league committee;
- b. criterion (1) but is 14 years of age and has a sports excellence certificate, then his/her case should be referred to the Chairman of the league committee.

Should the given player be selected? (The case is presented on October 12, 2012. All dates are in mm.dd.yyyy format.)

There are two cases based on the given set of conditions. Take a decision for both the cases and choose the correct option for each.

Naomi Brown, a 16 year old hockey champion at St. Louis High School has applied to participate in the United States Hockey League (junior). She has submitted the authorization letter from the principal and the recommendation letter from the school coach. Her team won four out of twelve interschool matches. One of these matches was against a team from Finland.

OPTIONS

The player should be selected

The player should not be selected

The case should be referred to the Director

The case should be referred to the Chairman

Insufficient data

PASSAGE

The conditions to select students for the United States Hockey League (junior) are as follows. The student should

1. be between 15-18 years of age and must have an authorization letter from the school's principal;
2. have played at least ten interschool matches;
3. have won at least five interschool matches;
4. have a recommendation letter from the school coach;
5. not have any record of misbehavior on the field, in the interschool matches played.

However, if a player satisfies all the criteria given above except

- a. criterion (3) but has experience of playing at least one international match, then his/her case should be referred to the Director of the league committee;
- b. criterion (1) but is 14 years of age and has a sports excellence certificate, then his/her case should be referred to the Chairman of the league committee.

Should the given player be selected? (The case is presented on October 12, 2012. All dates are in mm.dd.yyyy format.)

There are two cases based on the given set of conditions. Take a decision for both the cases and choose the correct option for each.

Harry, a 17 year old hockey player at St. Louis High School, has applied for participation in the United States Hockey League (junior). He has submitted the authorization letter from the principal. He was, however, not given a recommendation letter by the school coach due to a case of misbehavior on the field while playing an interschool match. His team won seven out of ten interschool matches they had played.

OPTIONS

The player should be selected

The player should not be selected

The case should be referred to the Director

The case should be referred to the Chairman

Inufficient data

PASSAGE

The conditions to select students for the United States Hockey League (Junior) are as follows. The student should

1. be between 15-18 years of age and must have an authorization letter from the school's principal;
2. have played at least ten interschool matches;
3. have won at least five interschool matches;
4. have a recommendation letter from the school coach;
5. not have any record of misbehavior on the field, in the interschool matches played.

However, if a player satisfies all the criteria given above except

- a. criterion (3) but has experience of playing at least one international match, then his/her case should be referred to the Director of the league committee;
- b. criterion (1) but is 14 years of age and has a sports excellence certificate, then his/her case should be referred to the Chairman of the league committee.

Should the given player be selected? (The case is presented on October 12, 2012. All dates are in mm.dd.yyyy format.)

There are two cases based on the given set of conditions. Take a decision for both cases and choose the correct option for each.

Naomi Brown, a 16 year old hockey champion at St. Louis High School has applied to participate in the United States Hockey League (Junior). She has submitted the authorization letter from the principal and the recommendation letter from the school coach. Her team won four out of twelve international matches. One of these matches was against a team from Finland.

OPTIONS

The player should be selected

The player should not be selected

The case should be referred to the Director

The case should be referred to the Chairman

Insufficient data

Refer to the symbols below and their corresponding meanings.

Options

The given signs denote the following operations/relationships:

"%" denotes "greater than"

">" denotes "equal to"

"=" denotes "not less than"

"@" denotes "not equal to"

"#" denotes "less than"

"%" denotes "not greater than"

Which of the two conclusions I and II is/are definitely true based on the information provided?

Only conclusion I is true

Only conclusion II is true

Neither conclusion I nor II is true

Both conclusions I and II are true

Statements:

P>S, S@T, P#R

Conclusions:

I. S%R

II. P@T

The given question is followed by two statements I and II. Decide if the statements contain sufficient information to answer the question.

Problem Question: When is Mark's birthday?

Statements:

- I) He was born after September 19 but before September 25.
- II) He was born in a leap year.

Options

Statement I alone is sufficient to answer the problem question.

Statement II alone is sufficient to answer the problem question.

Both statements put together are sufficient to answer the problem question.

Both the statements even put together are not sufficient to answer the problem question.

Refer to the symbols below and their corresponding meanings.

The given signs denote the following operations/relationships:

"%" denotes "greater than"

">" denotes "equal to"

"=" denotes "not less than"

"@" denotes "not equal to"

"#" denotes "less than"

"**" denotes "not greater than"

Which of the two conclusions I and II is/are definitely true based on the information provided?

Statements:

$P > S$, $S @ T$, $P \# R$

Conclusions:

I. $S \% R$

II. $P @ T$

Options

Only conclusion I is true

Only conclusion II is true

Neither conclusion I nor II is true

Both conclusions I and II are true

Refer to the symbols below and their corresponding meanings.

The given signs denote the following operations/relationships:

$A+B$ means A is equal to B .

$A-B$ means A is not equal to B .

$A=B$ means A is greater than B .

$A*B$ means A is greater than or equal to B .

A/B means A is less than B .

Which of the two conclusions I and II is/are definitely true based on the information provided?

Options

Only conclusion I is true

Only conclusion II is true

Neither conclusion I nor II is true

Both conclusions I and II are true

Statements:

$Q+R, R/S, S/T$

Conclusions:

I. Q/S

II. $Q=R$

The given question is followed by two statements I and II. Decide if the statements contain sufficient information to answer the question.

05 : 55

 Help  Exit

Options

Problem Question: Four people - A, B, C and D are sitting in a row. Who is sitting at the extreme right?

Statements:

- I) C is to the left of D.
- II) B is to the left of A.

Statement I alone is sufficient to answer the problem question.

Statement II alone is sufficient to answer the problem question.

Both statements put together are sufficient to answer the problem question.

Both the statements even put together are not sufficient to answer the problem question.



Quantitative Ability

Choose the correct option.

What is the value of $(\log_4 2 + \log_4 32)$?

Options

2

3

4

5

Choose the correct option.

If we permute 5 letters of the word 'MANGO', how many permuted words can be made with 'N' in the second place?

Options

5

6

12

24

Choose the correct option.

How many six-digit numbers can be formed from 0, 1, 5, 6, 7 and 8 in which the first digit is not 0?

Note: Repetition is not allowed.

Options

120

600

720

800



Choose the correct option.

If $\log_x(1/343) = -3$, then what is the value of x ?

Options

3

7

7

-3

Choose the correct option.

Which number should be divided by $(0.81)^{1/2}$ to arrive at a result of 81?

Options

9

81

72.9

0.9



Choose the correct option.

Aaron travels the first half of the distance at 50 miles/s and the second half at 75 miles/s. He travels a total distance of 3 miles. Find his average travel speed.

Options

60 mph

62.5 mph

55 mph

65 mph

Choose the correct option.

A salesperson sells a hair dryer at his store for a price between \$300 and \$700. The profit earned by selling the hair dryer for \$650 is twice the loss incurred when it is sold for \$350. What is the cost price of the hair dryer?

Options

\$550

\$450

\$350

\$150



Choose the correct option.

Eduardo offers to sell his house for \$18,400. If he charges 10% less, he will make a profit of 20%. What is the actual cost of the house?

Options

\$15,800

\$14,500

\$13,800

\$12,500

Choose the correct option.

A train 'A' starts from 'X' at 0500 hours at a speed of 45 mph. Another train 'B' starts from the same place in the same direction at 0700 hours at a speed of 60 mph. At what time will both the trains meet each other?

Options

1100 hours

1400 hours

1200 hours

1300 hours

Choose the correct option.

How many five-digit odd numbers can be made from numbers 1, 2, 3, 4 and 5?

Note: Repetition is not allowed.

Options

24

32

64

72

Choose the correct option.

What is the value of $(5^{-2} \times 10^{-4}) / (2^{-5} \times 5^{-6})$?

Options

2

5

10

Fill in the blank(s) with the appropriate option.

$\log 3600$ can also be expressed as ____.

Options

$$(2 \log 6) + 1$$

$$(6 \log 2) + 1$$

$$(2 \log 6) + 2$$

$$(6 \log 2) + 2$$

Choose the correct option.

In a poultry farm, 50 hens lay 200 eggs in 2 days. In how many days will 20 hens lay 400 eggs?

Options

15 days

10 days

5 days

8 days

Choose the correct option.

Options

Evaluate: $(4.56^3 + 5.44^3) / (4.56^2 - 4.56 \times 5.44 + 5.44^2)$

0.88

-0.88

1

10

Tech6Sense

Choose the correct option.

In how many ways can 8 different types of flowers be strung to form a garland so that 4 particular types of flowers are never separated?

Options

560

2,880

288

576



Choose the correct option.

How many four-digit numbers can be made using 1, 2, 3, 4, 5, 6 and 7 with none of the digits being repeated?

Options

7!

840

4!

42

Choose the correct option.

Max has to guess which hand holds a coin. What is the probability that he correctly guesses three times in a row?

Options

(1/6)

(1/2)

(1/4)

(1/8)

Choose the correct option.

In a mall, a token is given while personal belongings are deposited at the entrance. The tokens are lettered as a, b, c, ..., z, which are given by the security guard at random. What is the probability that the token given to a person is a consonant?

Options

5/21

21/26



5/26

26/21

Choose the correct option.

What is the sum of two consecutive numbers, the difference of whose squares is 19?

9:

10

18

19

Choose the correct option.

A train 'A' starts from 'X' at 0500 hours at a speed of 45 mph. Another train 'B' starts from the same place in the same direction at 0700 hours at a speed of 60 mph. At what time will both the trains meet each other?

Options

3100 hours

1400 hours

1200 hours

1300 hours

Fill in the blank(s) with the appropriate option.

The list price of a camera is \$300. If two successive discounts of 15% and 10% are allowed, its selling price will be _____

Options

\$229.50

\$231.50

\$232.50

\$234.50

Tech6Sense

Choose the correct option.

Two varieties of coffee worth \$14 per lb and \$15 per lb are mixed with a third variety in the ratio 1:1:2. If the mixture is worth \$17 per lb, what is the price of the third variety per lb?

Options

\$18.83

\$18.89

\$19.5

\$20

Tech6Sense

Choose the correct option.

01 : 44

Identify the greatest among the given values of x.

A. $x = 22^{22}$

B. $x = 2^{222}$

C. $x = 222^2$

Options

A

B

C

Cannot be determined

Choose the correct option.

Options

John, Dylan and Mathew are eligible to be the captain of the rugby team. Lucas, Gabriel, Samuel and Christopher are eligible to be the co-captain. In how many ways can a captain and a co-captain be chosen?

12

7

9

16

Choose the correct option.

In a poultry farm, 50 hens lay 200 eggs in 2 days. In how many days will 20 hens lay 400 eggs?

Options

15 days

10 days

5 days

8 days

Choose the correct option.

5 paramedics and 4 technicians are registered for a rescue team. In how many possible combinations can a rescue team of a paramedic and a technician be formed?

Options

9

40

20

18

Choose the correct option.

If two unbiased dice are thrown simultaneously, what is the probability of getting 4 at least once in a single throw of the two dice?

Options

1/6

1/9

7/36

11/36

Choose the correct option.

The causes of productivity loss are to be written around a circle in the annual report. In how many ways can an analyst write them around the circle, if the number of causes are 5?

Options

5!

$5C_5$

$5P_5$

4!

$4C_4$

Choose the correct option.

'A' started a business with \$270,000 and 'B' joined him three months later. How much money did 'B' invest if the profit share of 'A' at the end of the year was $\frac{3}{5}$ of the total profit?

Options

\$280,000

\$100,000

\$270,000

\$240,000

Choose the correct option.

Options

Caleb, Gavin and Carter have to board a train. The probabilities of Caleb, Gavin and Carter boarding the train are $1/2$, $3/4$ and $2/5$ respectively. What is the probability that only one of them will be able to board the train?

9/40

3/40

7/20

1/20

Choose the correct option.

Options

Doris and Gloria randomly choose a color from red, orange, and yellow. What is the probability that both choose orange?

(1/3)

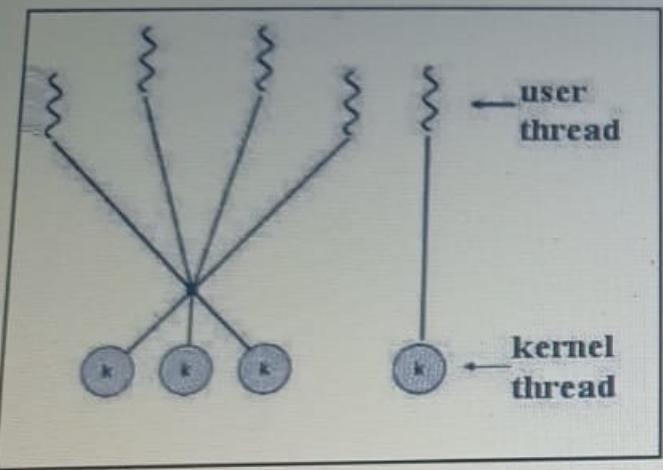
(1/6)

(1/9)

(2/3)

Computer Programming Computer Science

PASSAGE



Choose the correct option.

The relationship between a user thread and a kernel thread can be presented as a thread model. Identify the shown model.

OPTIONS

Many-to-many model

Many-to-one model

One-to-one model

Two-level model

SUBMIT ANSWER

Choose the correct option.

Each process in a system is holding a resource and is waiting to acquire another resource that is held by some other process. All the processes are blocked because of the non-availability of the required resources. What is this condition known as?

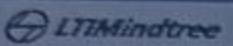
Options

Starvation

Busy waiting

Deadlock

Indefinite blocking



Choose the correct option.

Which sorting algorithm yields approximately the same worst-case and average-case running time behavior in $O(n \log n)$?

Options

Bubble sort and Selection sort

Heap sort and Merge sort

Quick sort and Radix sort

Tree sort and Median-of-3 Quick sort

PASSAGE

Group A	Group B
A. First-Come, First-Serve Replacement Algorithm	1. Coalescing
B. Least Recently Used Replacement Algorithm	2. Stack Algorithm
C. Paging	3. Belady's Anomaly
D. Buddy System	4. Thrashing

Choose the correct option.

Refer to the given table. Match the memory management terms associated with them in Group B.

OPTIONS

A-2, B-3, C-1, D-4

A-3, B-2, C-4, D-1

A-3, B-2, C-1, D-4

A-1, B-2, C-3, D-4

Choose the correct option.

which normal form is a table "customer" in, if it has the following characteristics?

1. It has transitive dependencies.
2. There are no partial dependencies in it.
3. There is no column with redundancy in it.

Options

1NF

2NF

3NF

BCNF

Choose the correct option.

Which construct **CANNOT** be used for process synchronization?

Options

Semaphores

Monitors

Mutex locks

None of the above

Choose the correct option.

A computer's memory consists of 4K words of 16 bits each, and one byte equals 8 bits.
How many bytes does this memory contain?

Options

2K

4K

8K

16K

Choose the correct option.

Which command in SQL is used to delete a table's entire data and structure?

Options**Drop****Destroy****Delete****Truncate**

Choose the correct option.

What does isolation in ACID rules for a transaction in a database mean?

Options

Either the effect of the entire transactions is reflected in the database or the transaction is rolled back to its original state.

No transaction can interfere in the end result of another transaction.

Effects of a successful transaction must persist in a database.

Every individual transaction must leave the database in a consistent state maintaining the integrity of the database.

Choose the correct option.

How can a call to an overloaded function be ambiguous?

Options

The name of the function might have been misspelled

There might be two or more functions with the same name

There might be two or more functions with equally appropriate signatures

None of the above

Choose the correct option.

Options

A programmer writes a program to find an element in the array A[5] with the elements: 8 30 40 45 70. The program is run to find a number "X", that is found in the first iteration of binary search. What is the value of "X"?

40

8

70

30

Choose the correct option.

Options

Which expression gives the maximum number of nodes at level i^{th} of a binary tree?

(Note: The root is at level 1.)

2^{i-1}

3^{i-1}

2^i

$2^i - 1$

Choose the correct option.

A language has 28 different letters in total. Each word in the language consists of a maximum of 7 letters. A programmer wants to create a data type to store a word of this language. She decides to store the word as an array of letters. How many bits should she assign to the data type to store all kinds of words of the language?

Options

7

14

21

28

35

28

196

Choose the correct option.

Code A contains a set of eight lines that occur ten times in different points of the program. This code is passed to a programmer who puts the set of eight lines in a function definition and calls them at the ten points in the program. Assume this new code to be Code B. Which code will run faster using an interpreter?

Options

Code A

Code B

Both the cod

None of the a

Choose the correct option:-

Recursion makes a significant characteristic of which of the given programming paradigms?

Options

Procedural Par

Functional Par

Object Oriente

Structural Par

Choose the correct option.

How can a call to an overloaded function be ambiguous?

Options

The name of the function might have been misspelled

There might be two or more functions with the same name

There might be two or more functions with equally appropriate signatures

None of the above

SUBMIT

Choose the correct option.

Which of the given statements is TRUE about a breadth first search?

Beginning from a node, all the adjacent nodes are

Beginning from a node, each adjacent node is fully traversing the next adjacent node

Beginning from a node, the nodes are traversed in

None of the above

Choose the correct option.

Options

Consider the given conditions in regards to binary search performed on an array named *MyArray* -

1. *Beg > End*
2. *Beg < End*
3. *MyArray[mid] != item_to_be_searched*

Only 1

Which of the given conditions forms the termination condition of an iterative binary search function when the variables *Beg*, *End* and *mid* have their usual meanings?

Only 2

Only 3

Both 2 and 3

Choose the correct option.

A stack is implemented as a linear array $A[0..N-1]$. A programmer writes the function given below to pop out an element from the stack.

```
function POP( top, N )
{
    if(X)
    {
        top = top - 1;
    }
    else
    {
        print "Underflow"
    }
}
```

Options

top=N-1

top<N

top>1

top>= 0

Choose the correct option.

Options

A data type is stored as a 6-bit signed integer. Which of the given options cannot be represented by this data type?

-72

0

32

18

Choose the correct option.

Options

What is the average time required to perform a successful sequential search for an element in an array A(1: n)?

(n+1)/2

$\log_2 n$



$n(n+1)/2$

n^2

Choose the correct option.

Options

Identify the lowest level format to which the computer converts a program in a higher language before execution.

English code

Machine cod

Assembly lan

System langu

Consider the code given below. Assume that "a" and "b" are passed by reference. What will the output of the program be when the function `calculate()` is executed?

```
function modify(b,a)
{
    return a - b
}

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

Options

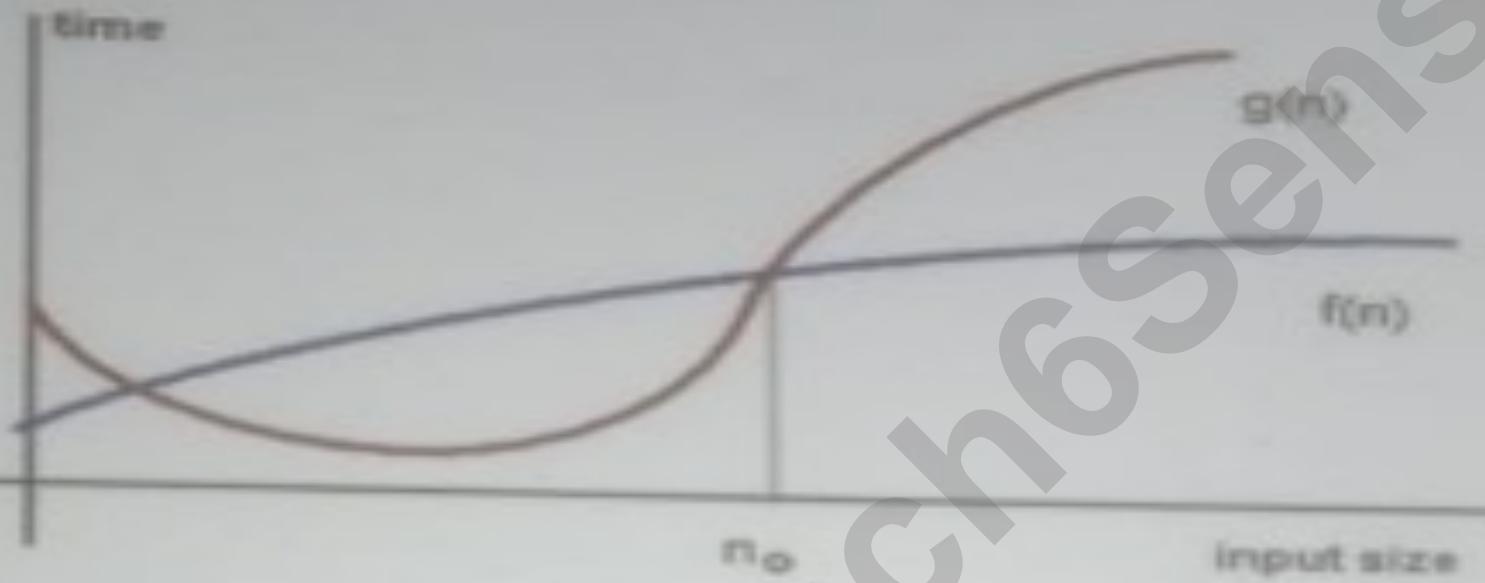
A

B

C

Error

ASSAGE



What can you say about figure?

OPTIONS

$f(n)=\Theta(g(n))$

$f(n)=o(g(n))$

$f(n)=O(g(n))$

Choose the correct option.

Options

What is the maximum number of edges in an undirected graph with "n" vertices?

$n^2(n-1)/2$

$n^2(n+1)/2$

$n^k n$

2^n

Choose the correct option.

What does the following function do?

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

Returns the max of (a,b)

Returns the min of (a,b)

Loops forever

Always returns the second parameter

PASSAGE

```
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
```

Choose the correct option.

A librarian has to rearrange the library books on a shelf in a proper order at the end of each day. Which sorting technique should be the librarian's ideal choice?

Bubble

Insert

Insert

Select

Heap

Tech6Sense

Options

Choose the correct option.

A programmer tries to debug a code of 10,000 lines. It is known that there is a logical error in the first 25 lines of the code. What is an efficient way to debug the code?

Compile the entire code and check it line by line.

Use an interpreter on the first 25 lines of code.

Compile the entire code and run it.

None of the above can be used to debug the code.

Compile the

Use an inter

Compile the

None of the

Choose the correct option.

Options

A programmer needs to solve a problem that takes a number "n" as the input. The problem can solve for "n" if the solution for " $n-1$ " is given. Which programming technique should be used in this scenario?

Iteration

Decision-making

Object-oriented

Recursion

Choose the correct option.

What is the default scope of fields in a class of a C++ program?

Options

Protected

Public

Private

None of the above

PASSAGE

```
function myfunc()
{
    constant integer i=5
    if( i > 3 )
        print "I am small"
    if( i > 5 )
        print "I am large"
    else print "I am different"
}
```

DE : ES

OPTIONS

I am small

I am small or

I am small and

This code will

Tech6Sense

Choose the correct option.

Options

A programmer writes an efficient program to add two upper triangular 10×10 matrices with the elements on the diagonals retained. How many total additions will the program make?

100

55

25

10

Choose the correct option.

Consider an array on which bubble sort is used. To which of the given elements will the bubble sort compare the element $A[x]$ with, in a single iteration?

Options

A[x+1]

A[x+2]

A[x+2x]

All of the above

Choose the correct option.

What is Belady's anomaly?

For some page replacement algorithms, page faults may increase as the number of allocated frames increases.

For some page replacement algorithms, page faults may decrease as the number of allocated frames increases.

For some page replacement algorithms, page faults may decrease as the number of allocated frames decreases.

For some page replacement algorithms, page faults do not depend on the number of frames.

Tech6Sense

Choose the correct option.

The head of a moving head disk with 100 tracks numbered from 0 to 99 is currently serving a request at track 50. The queue of requests kept in the "first-come, first-served" order is 10, 60, 70, 40, 80. What will be the total head movement for these requests?

Options

150

160

170

180

LTI Mindtree

24 : 47

PASSAGE

```
class brush
{
    private:
        integer size, c
        rcode
    function getdata() { ... } // Statement 1
    public:
        integer name // Statement 2
    function putdata() { ... }
}

function main
{
    brush b1, b2
    print b1.name // Statement 3
    b2.getdata() // Statement 4
}
```

Choose the correct option.

Refer to the given pseudocode. The code accessible member function and a data objectname.functionname and objectname should be deleted from the code to rectify.

OPTIONS

- Statement 1
- Statement 2
- Statement 3
- Statement 4



ETIMindtree

PASSAGE:

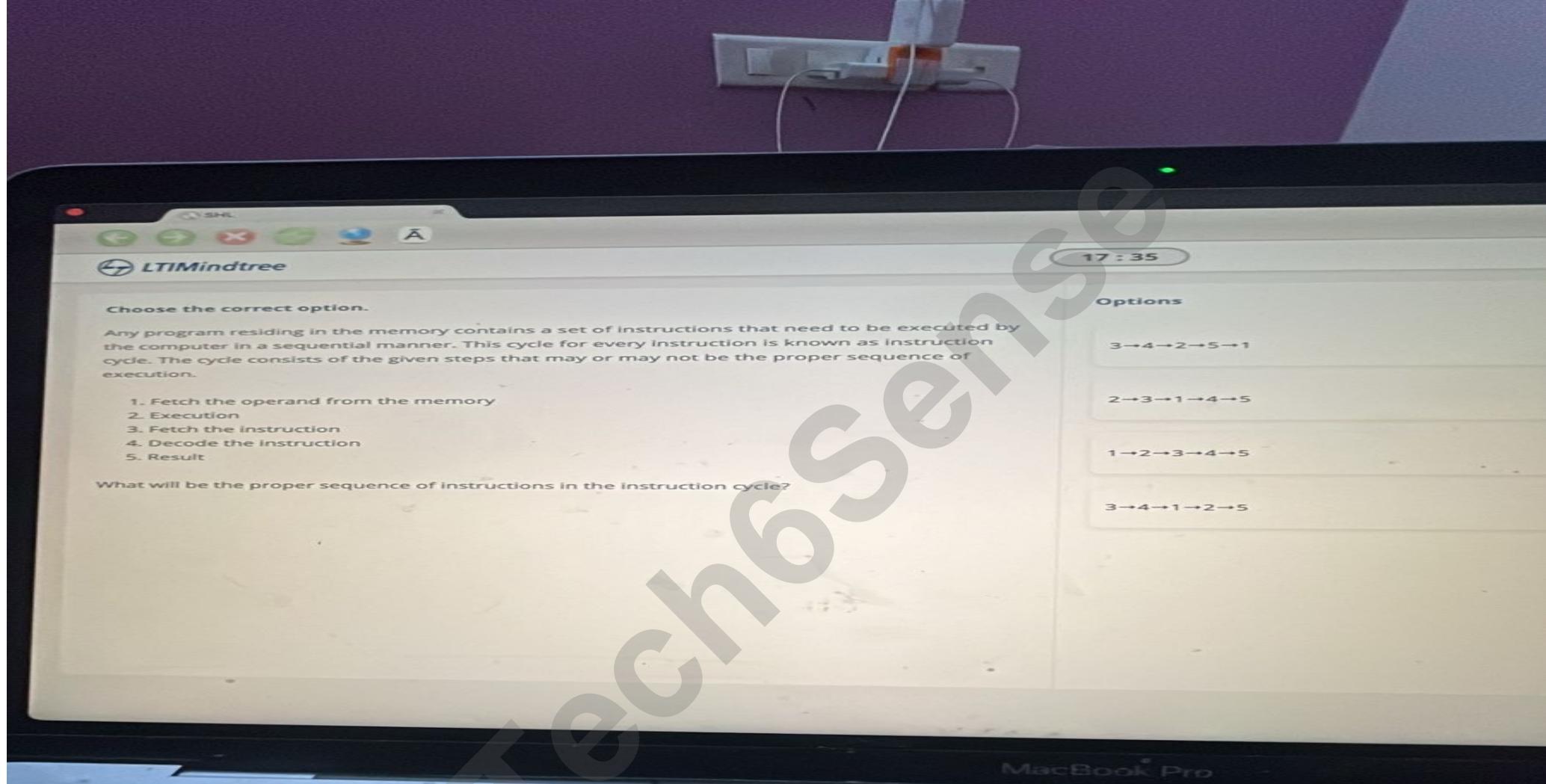
Process	Burst Time (in milliseconds)
P1	8
P2	4
P3	2

Choose the correct option:

The processes P1, P2 and P3 shown in the table arrive at the same time and are processed by the Shortest Job First (SJF) scheduling algorithm. Calculate the average wait-time in milliseconds.

OPTIONS:

- 3.6
- 5.6
- 6.3
- 7.3



SHL

LTI Mindtree

15 : 59

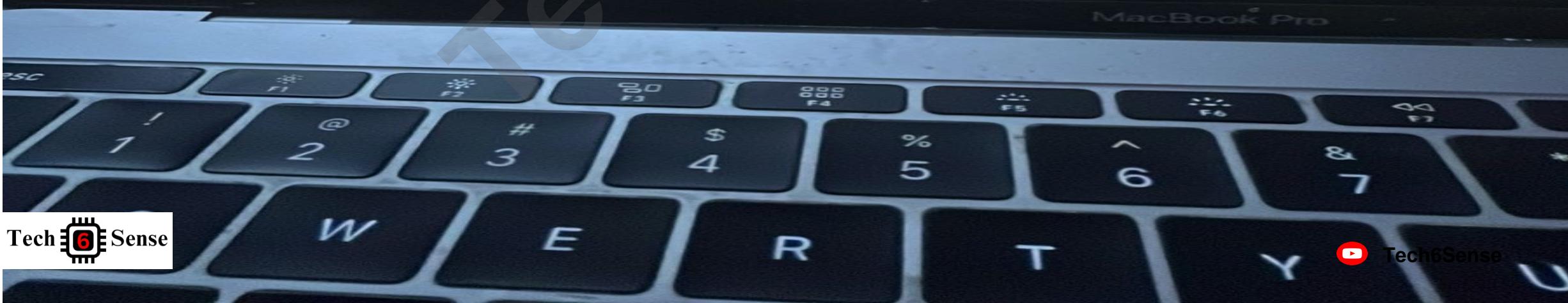
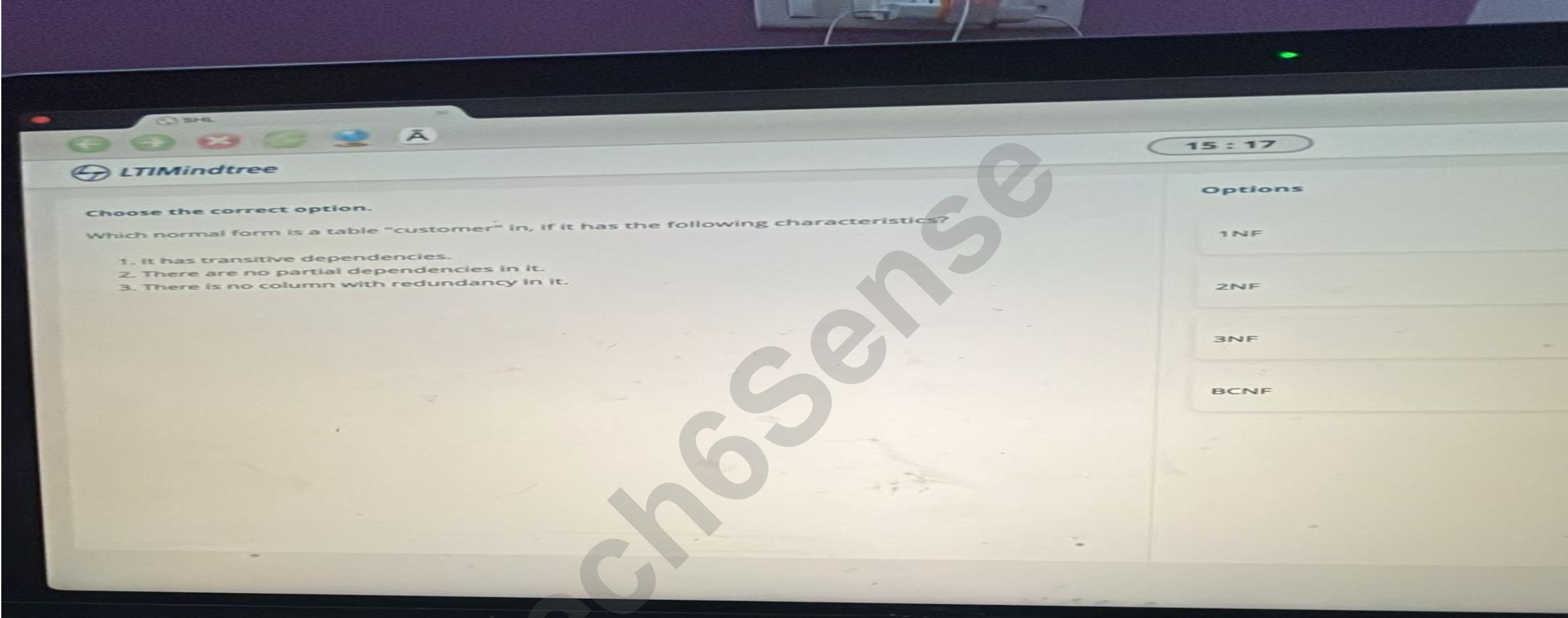
Choose the correct option.

Each process in a system is holding a resource and is waiting to acquire another resource that is held by some other process. All the processes are blocked because of the non-availability of the required resources. What is this condition known as?

Options

- Indefinite blocking
- Busy waiting
- Starvation
- Deadlock

The image shows a laptop screen with a question from an LTIMindtree test. The question asks about a specific condition in a system where processes are holding resources and waiting for others, resulting in all processes being blocked. It provides four options: Indefinite blocking, Busy waiting, Starvation, and Deadlock. The laptop is a MacBook Pro, and the keyboard is visible at the bottom.

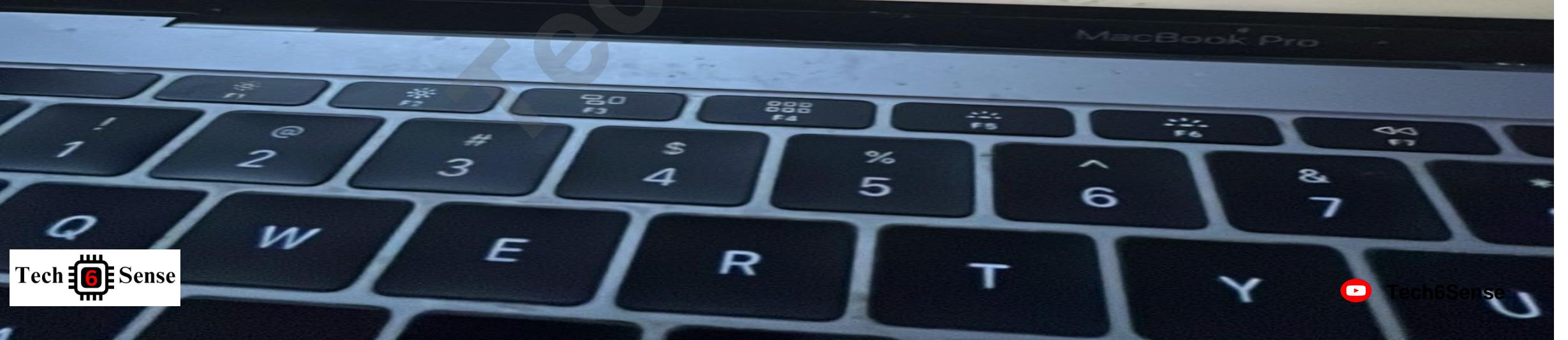
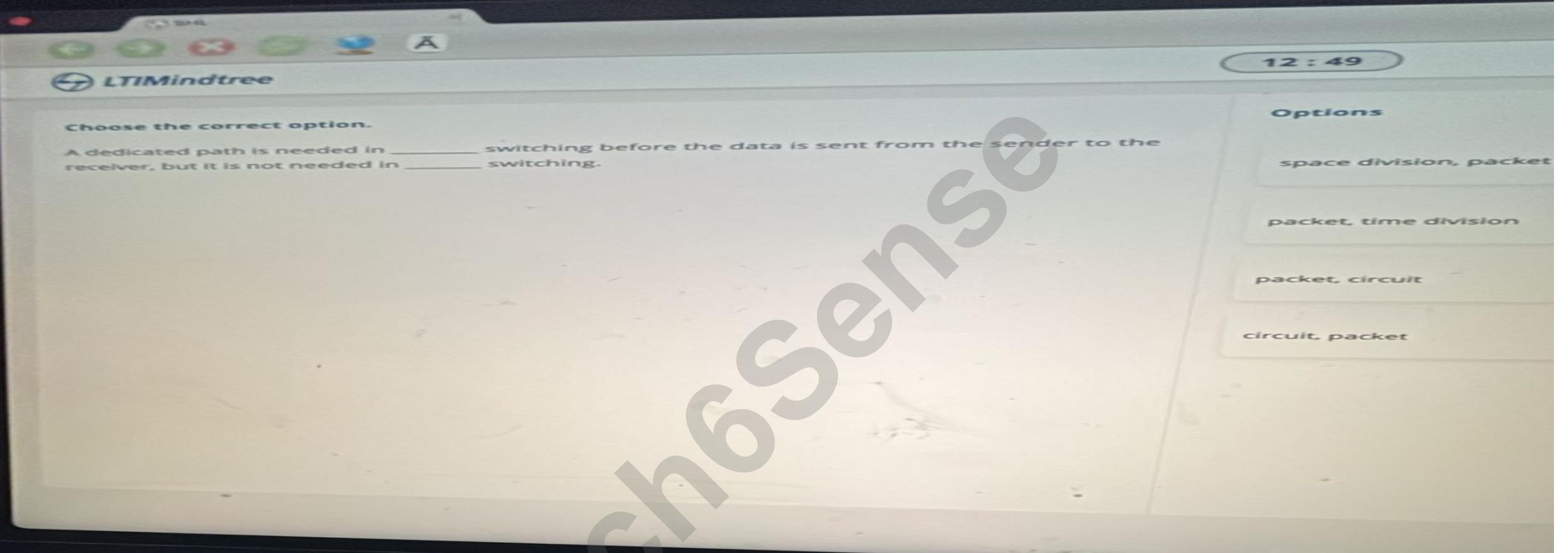


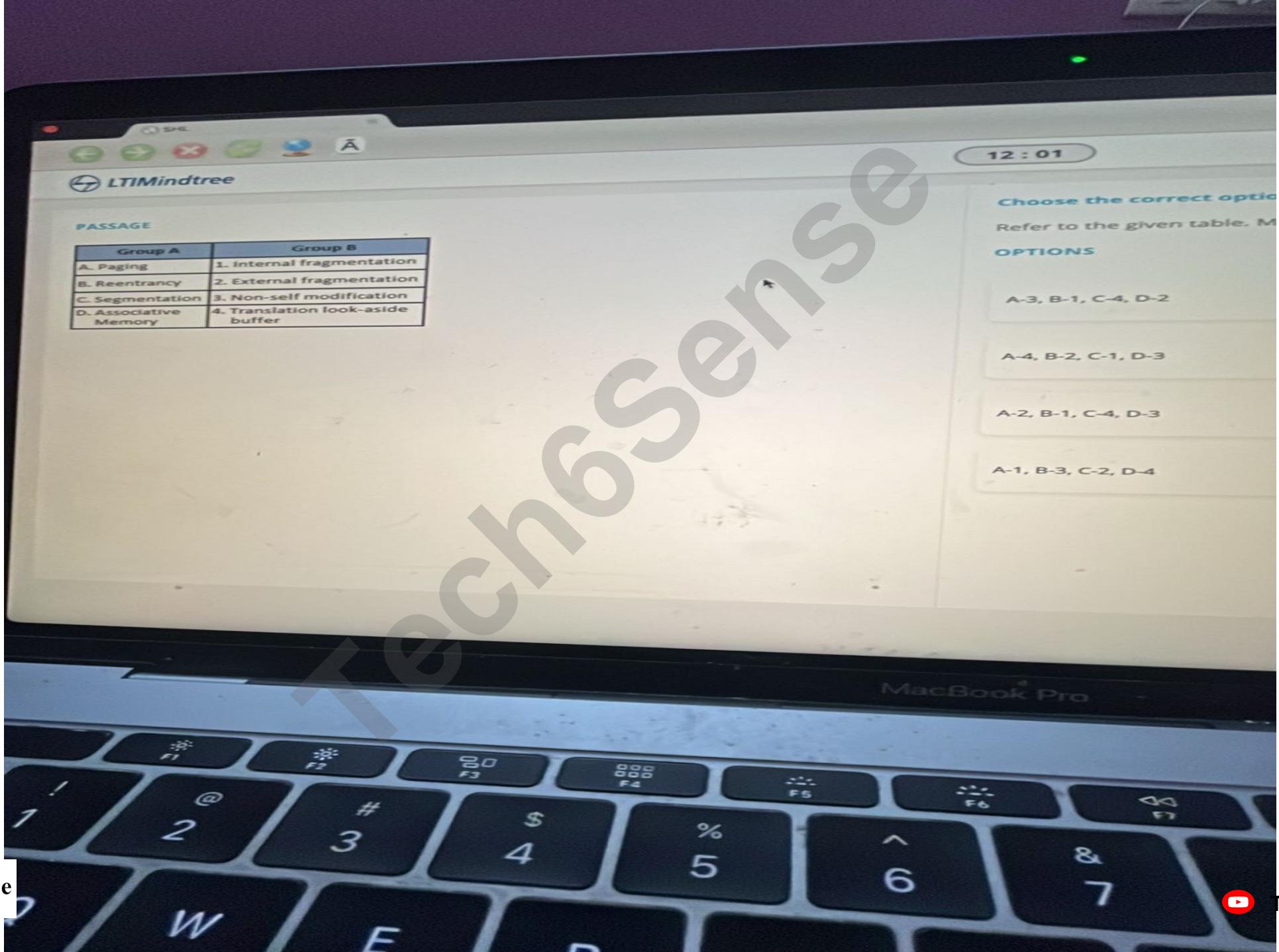
Choose the correct option.

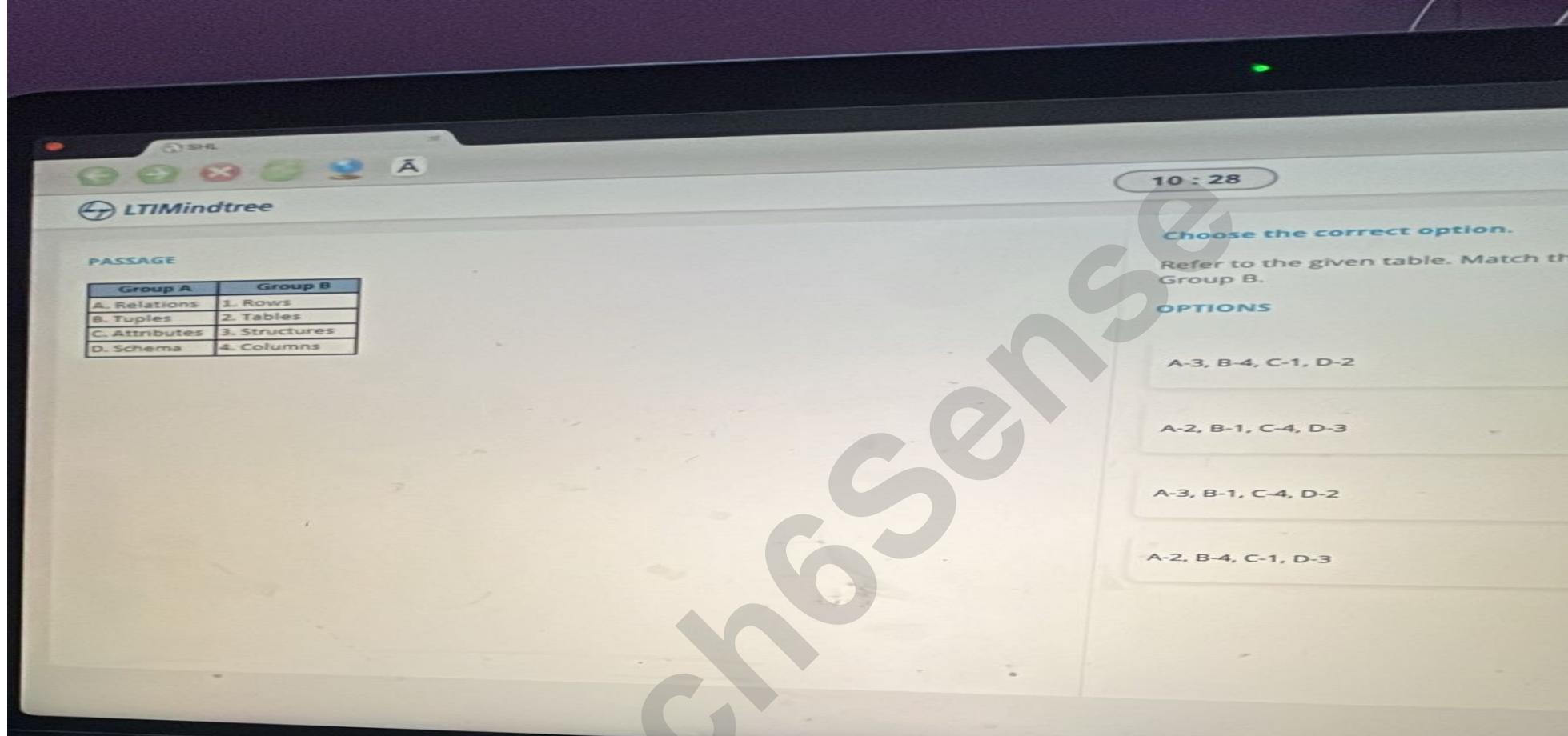
A dedicated path is needed in _____ switching before the data is sent from the sender to the receiver, but it is not needed in _____ switching.

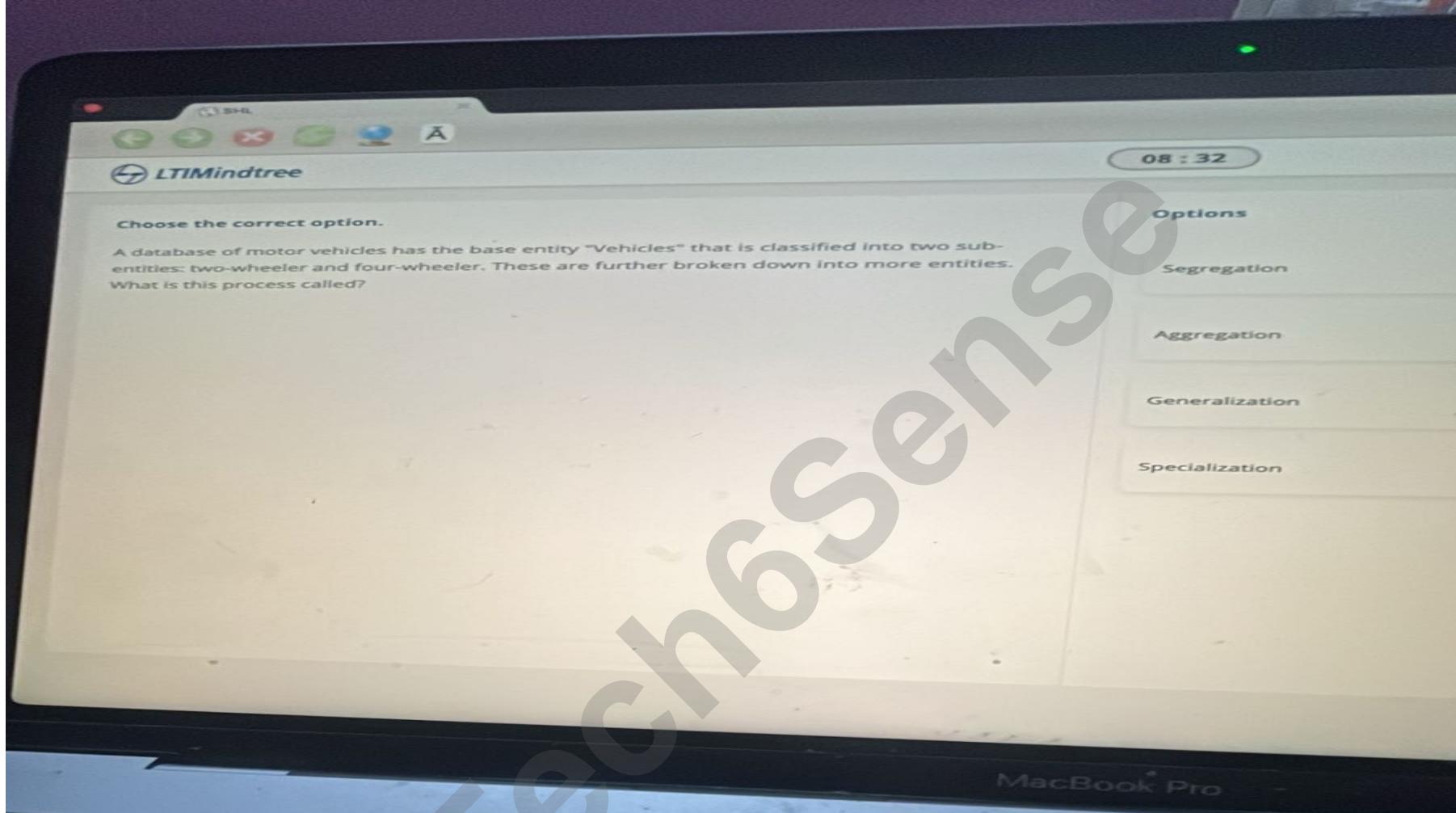
Options

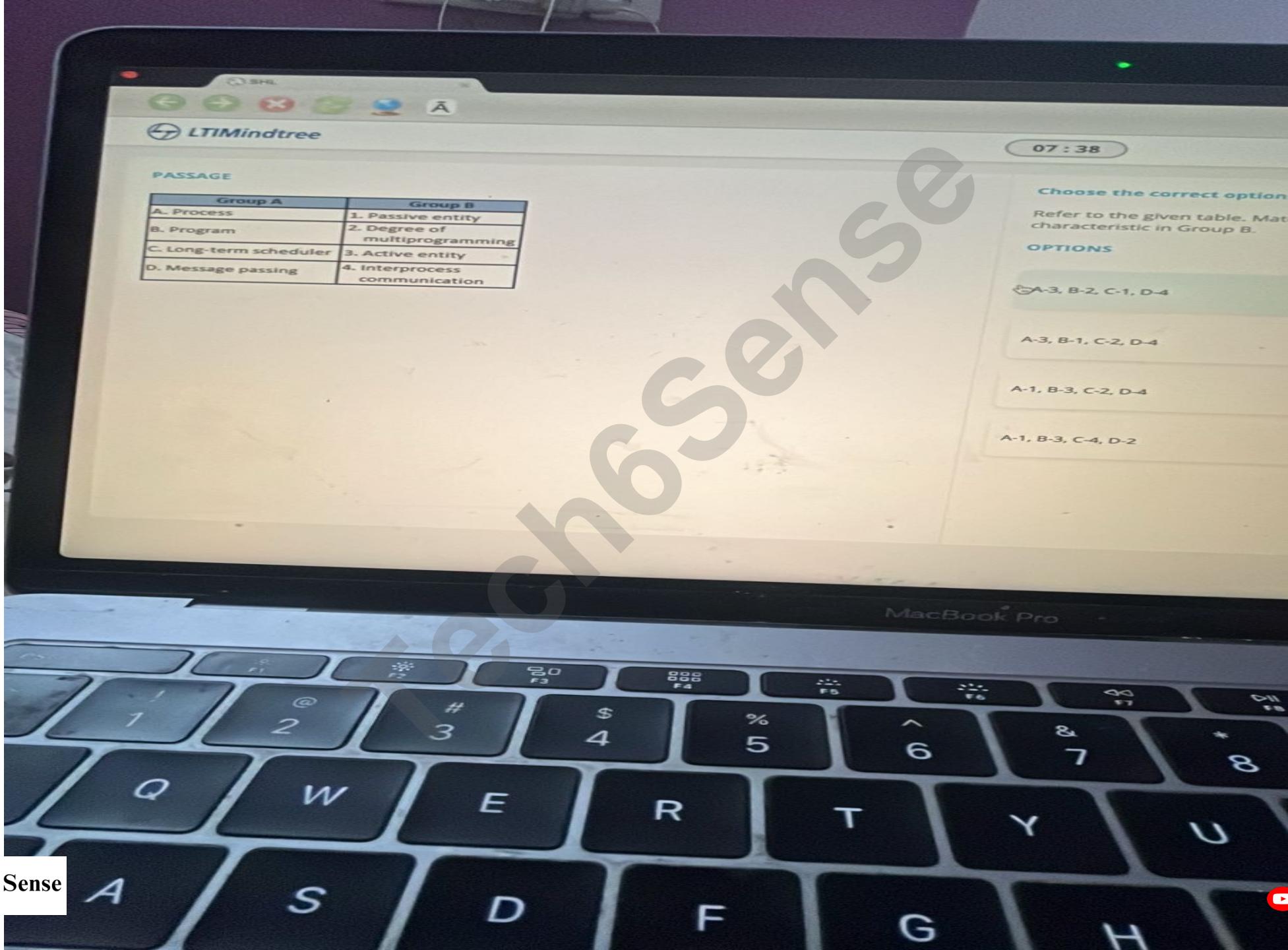
- space division, packet
- packet, time division
- packet, circuit
- circuit, packet

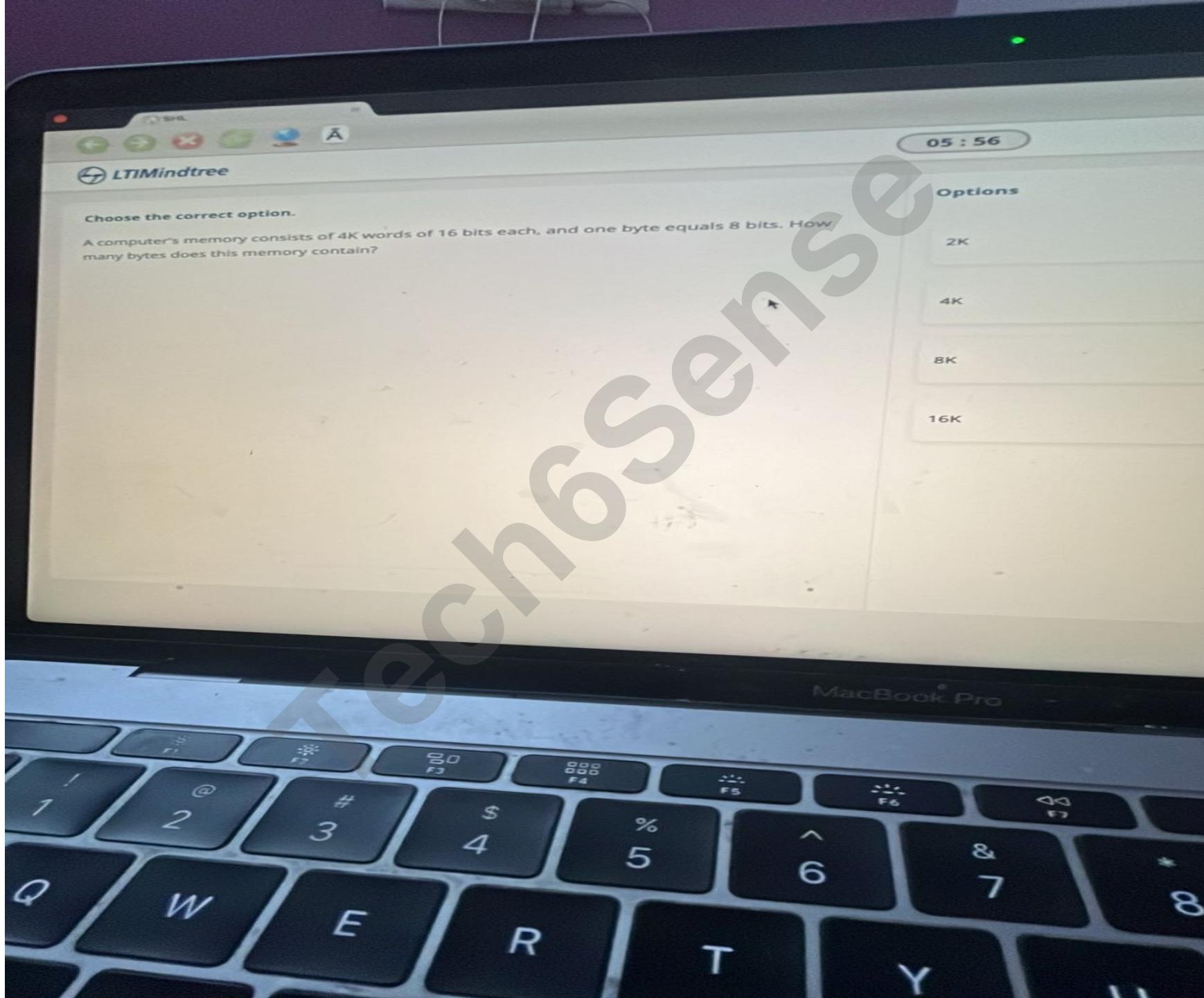












Choose the correct option.

Which of the given statements is TRUE about a "bipartite graph" with "n" nodes?

23 / 40

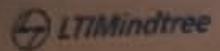
Options

It contains n edges.

It contains a cycle of odd length.

It contains no cycle of odd length.

It contains n^2 edges.



Choose the correct option.

What will be returned if $f(a,b)$ is called in the following functions?

```
function g(int n)
{
    if (n>0) return 1;
    else return -1;
}
```

```
function f(int a, int b)
{
    if (a>b) return g(a-b);
    if (a<b) return g(b-a);
    return 0;
}
```

Options

1 if $a>b$, -1 if $a<b$, 0 otherwise

Always +1

0 if a equals b , +1 otherwise

-1 if $a>b$, 1 if $a<b$, 0 otherwise

Choose the correct option.

A data type is stored as a 6-bit signed integer. Which of the given options cannot be represented by this data type?

Options

-12

0

32

18

Choose the correct option.

01 : 34



A dedicated path is needed in _____ switching before the data is sent from the sender to the receiver, but it is not needed in _____ switching.

Options

packet, circuit

circuit, packet

packet, time division

space division, packet



Choose the correct option.

What is the name given to the function which has no memory or I/O side effects?

Options

Pure Function

Subroutine

Procedure

Method

Choose the correct option.

Options

Refer to the pseudocode given below.

```
integer a  
pointer c, d  
a = 30  
c = &a  
d = c  
a = a + 10  
print *c
```

30

4165

40

This code is used with the following meaning:

"pointer" is a data type that contains memory address (or pointers)

Statement "a = *b" puts the value at the memory address referenced by b into a

Statement "a = &b" puts the memory address of b into a

Statement "*b = a" puts the value a at the memory address referenced by b

4166

What will be the output if the compiler saves the first integer at the memory location 4165 and the rest at the consecutive memory spaces in order of declaration?
(Note: The integer is one byte long.)



Choose the correct option.

In the execution process of a program, this technique involves the intermediate representation to be compiled to native machine code at run time. What is the name of this technique?

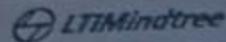
Options

Static compilation

Run time interpretation

Static interpretation

Just in time compilation



Choose the correct option.

What best describes the space complexity of a program?

Options

Amount of hard disk space required to store the program

Amount of hard disk space required to compile the program

Amount of memory required for the program to run

Amount of memory required for the program to compile

Choose the correct option.

What does the following function do?

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

Options

Returns the max of (a,b)

Returns the min of (a,b)

Loops forever

Always returns the second parameter

PASSAGE

A. Relations	1. Rows
B. Tuples	2. Tables
C. Attributes	3. Structures
D. Schema	4. Columns

Choose the correct option.

Refer to the given table. Match the database-specific terms in Group A with their corresponding synonyms in Group B.

OPTIONS

A-3, B-1, C-4, D-2

A-2, B-1, C-4, D-3

A-2, B-4, C-1, D-3

A-3, B-4, C-1, D-2

Options

Iteration

Decision-making

Object-oriented programming

Recursion

Choose the correct option.

Consider the code given below. How many times will "Hello" be printed if $m < n$ and exactly one of (m, n) is even?

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

Options

$(n - m + 1)/2$

$1 + (n - m)/2$

$1 + (n - m)/2$ if m is even, $(n - m + 1)/2$ if m is odd

$(n - m + 1)/2$ if m is even, $1 + (n - m)/2$ if m is odd

Choose the correct option.

How many nodes does a full binary tree with " n " leaves contain?

Options

$2n + 1$ nodes

$\log_2 n$ nodes

$2n - 1$ nodes

$2n$ nodes

10%

 LTIMindtree

Q1/25

Choose the correct option.

How many nodes in a tree with n nodes have no ancestors?

Options

0

1

2

 $\log n$

Choose the correct option.

A stack is implemented as a linear array $A[0..N-1]$. A programmer writes the function given below to pop out an element from the stack.

```
function POP( top, N )
{
    if( X )
    {
        top = top - 1
    }
    else
    {
        print "Underflow"
    }
    return top
}
```

What should substitute the condition "X"?

Options

top < N - 1

top < N

top > 1

top >= 0

Choose the correct option.

Aparajita wants to make a function that is not bound to any identifier. Which of the given functions should she incorporate in her program?

Options

Anonymous Function

Friend Function

Null Function

Global Function

Choose the correct option.

A programmer is making a database of animals in a zoo along with their properties. The possible animals are dog, lion and zebra. Each one has attributes as herbivorous, color and nocturnal. The programmer uses the object-oriented programming paradigm for this. How will the system be conceptualized?

Options

class: Animal; objects: dog, lion and zebra; data members: herbivorous, color and nocturnal

class: Animal; objects: herbivorous, color and nocturnal; data members: dog, lion and zebra

classes: dog, lion and zebra; objects: Animal; data members: herbivorous, color and nocturnal

None of the above

Choose the correct option.

Code A contains a set of eight lines that occur ten times in different points of the program. This code is passed to a programmer who puts the set of eight lines in a function definition and calls them at the ten points in the program. Assume this new code to be Code B. Which code will run faster using an interpreter?

Options

Code A

Code B

Both the codes would run at the same speed

None of the above

Choose the correct option.

A class contains two integers as private members. Two member functions (public) are defined in it - one to add the two integers and another to subtract the two integers. A programmer wants to add a new functionality to enable the multiplication of the two numbers. Which of the given options should be adopted to do this?

Options

Define a third public member function that multiplies the two numbers.

Define public member functions to return the values of both the integers and then multiply them in the code. By returning the values, any operation can be performed on future, giving extensibility to the code.

Define a third private member function that multiplies the two numbers.

Define private member functions to return the values of both the integers and then multiply them in the code. By returning the values, any operation can be performed on future, giving extensibility to the code.

PASSAGE

P1	8
P2	3
P3	5

Choose the correct option.

The processes P1, P2 and P3 shown in the table arrive at the same time and are processed by the Shortest Job First (SJF) scheduling algorithm. Calculate the average wait time in milliseconds.

OPTIONS

3.6

5.6

6.3

7.3

PASSAGE

```
function main()
{
    automatic variable var
    print var
}
```

Choose the correct option:
A pseudo-code is used which is self explanatory.

What will be the output generated when the given code is executed?

OPTIONS

0

1

Garbage Value

This code will generate a compile time error

PASSAGE

A. Process	1. Passive entity
B. Program	2. Degree of multiprogramming
C. Long-term scheduler	3. Active entity
D. Message passing	4. Interprocess communication

Choose the correct option.

Refer to the given table. Match the term related to process management in Group A with its characteristic in Group B.

OPTIONS

A-1, B-3, C-2, D-4

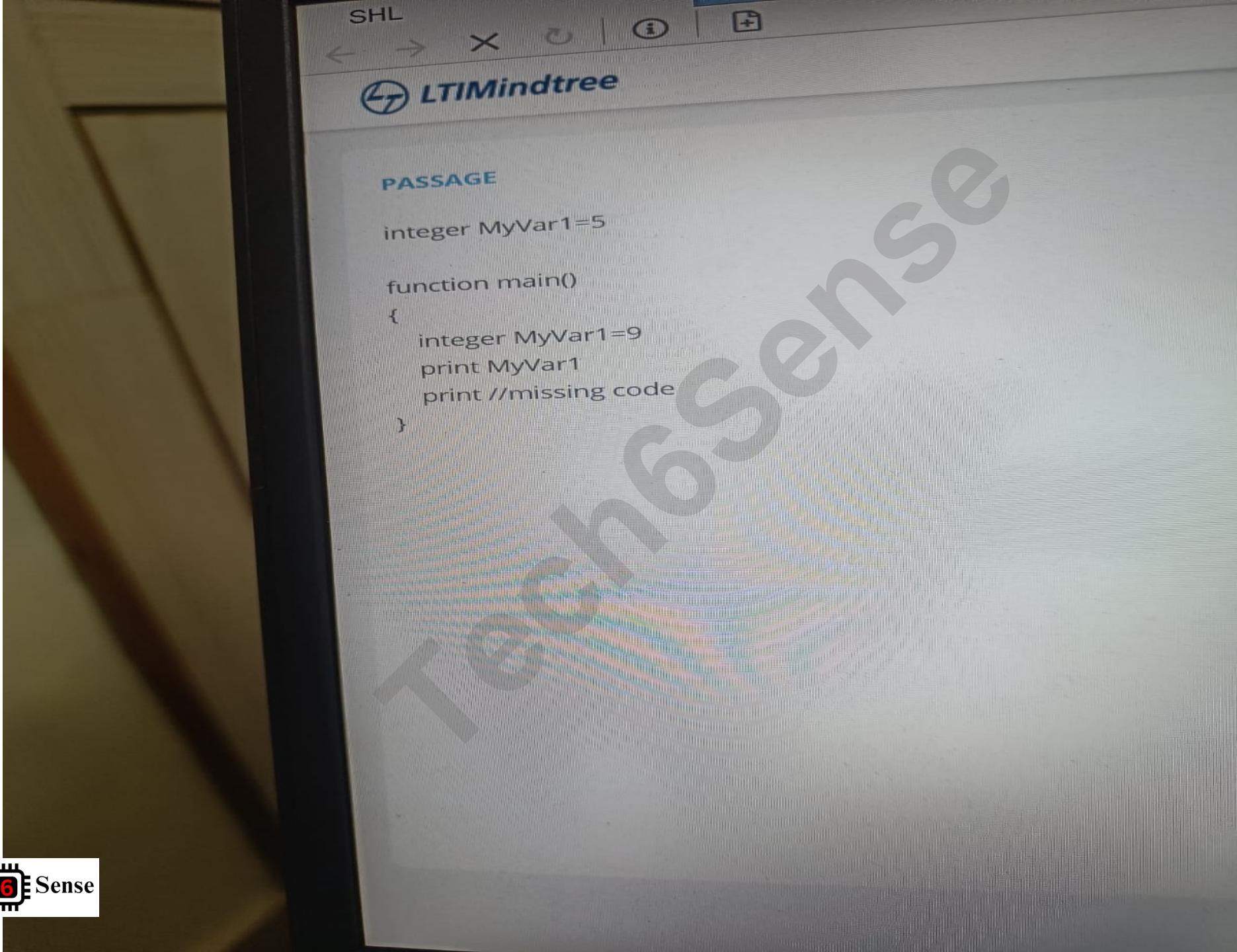


A-3, B-1, C-2, D-4

A-1, B-3, C-4, D-2

A-3, B-2, C-1, D-4





PRACTICE

Group A	Group B
A. Unicasting	1. Message is sent from a source node to a single destination node
B. Broadcasting	2. Message is sent to a subset of the network nodes
C. Multicasting	3. Message is sent to all the nodes in the network

Choose the correct option.

Refer to the given table. Match the transmission technique in Group A with its characteristic in Group B.

OPTIONS

A-1, B-3, C-2

A-1, B-2, C-3

A-2, B-1, C-3

A-2, B-3, C-1

Choose the correct option.

Which routing protocol is used to distribute routing information between different organizations and their customers?

Options

Interior Gateway Routing Protocol (IGRP)

Intermediate System-to-Intermediate System (IS-IS)

Border Gateway Protocol (BGP)

Open Shortest Path First (OSPF)

Choose the correct option.

A database of motor vehicles has the base entity "Vehicles" that is classified into two sub-entities: two-wheeler and four-wheeler. These are further broken down into more entities. What is this process called?

Options

Generalization

Aggregation

Specialization

Segregation

Choose the correct option.

What is Belady's anomaly?

Options

For some page replacement algorithms, page faults may increase as the number of allocated frames increases.

For some page replacement algorithms, page faults may decrease as the number of allocated frames increases.

For some page replacement algorithms, page faults may decrease as the number of allocated frames decreases.

For some page replacement algorithms, page faults do not depend on the number of fram

Choose the correct option.

The head of a moving head disk with 100 tracks numbered from 0 to 99 is currently serving a request at track 50. The queue of requests kept in the "first-come, first-served" order is 10, 60, 70, 40, 80. What will be the total head movement for these requests?

Options

150

160

170

180

Choose the correct option.

A data type is stored as a 6-bit signed integer. Which of the given options cannot be represented by this data type?

29 / 42

Options

-12

0

32

18

