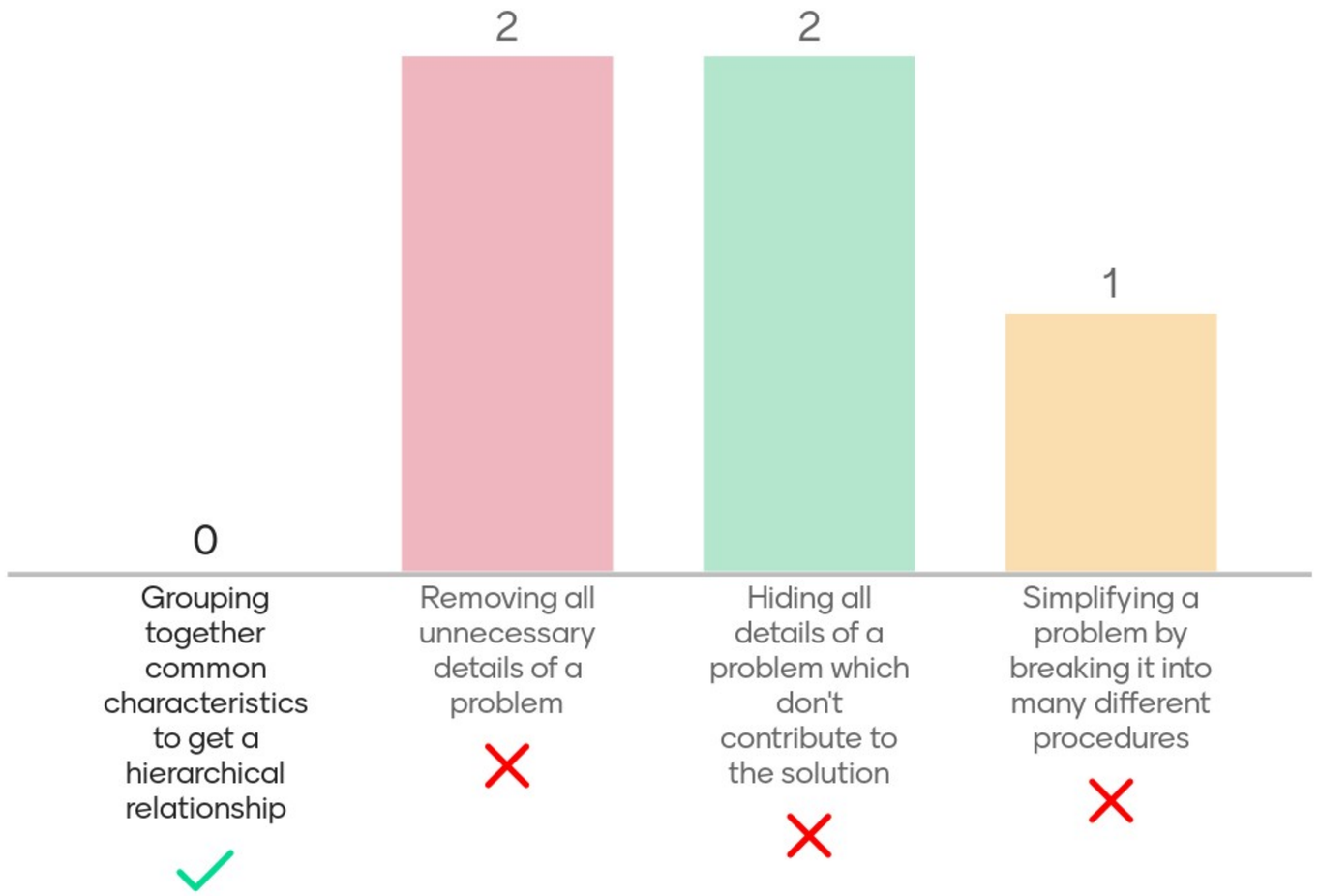
BIG DATA

13B – 4.11 – Big Data – Wed 15th March – Mr Woodley.

What is Abstraction by Generalisation?

Mentimeter



5

How can you tell an accepting state in a Finite State Machine Diagram?

Mentimeter

because it has a circle within a circle innit

Two co-centric circles

two circles/

reaches end state

a small circle in the state

two circles

hi

because there is a square - andrew

this is when you have reached the point where you cannot do anything else

5

How can you tell an accepting state in a Finite State Machine Diagram?

Mentimeter

a

5

What is a finite set?

Mentimeter

has a limited number of possible solutions

There are a finite (non-infinite, can be represented cardinally) number of elements

it is finite - Jonathan

set of inputs

it is infinte - Andrew

it is a set that is bare finite

a limited amount of inputs

Short answers are recommended.
You have 200 characters left.

5

List the first 3 numbers of the set

Mentimeter

12, 14, 16

12,14,16

1,2,3 - Andrew

Short answers are recommended.
You have 200 characters left.

12, 14, 16, 18, 20.....

15,20,30

come on now andrew

12,14,16

What is a recursive subroutine?

Mentimeter

A subroutine that calls itself

a function which is called within itself

takes a fanction as an imput

Short answers are recommended. You have 200 characters left.

a subroutine that in the subroutine calls itself

a subroutine that calls itself

andrew

5

What is the Cartesian product (X) of S1 and S6?

a,b,c

a,b,c

{a,b,c}

{a, b, c}

{}

Short answers are recommended. You have 200 characters left.

a, b, c in my most humble opinion

i dont know

aaaaaaaaaaa

Figure 3

Mentimeter

$S1 = \{a, b\}$
$S2 = \{a, b, c\}$
$S3 = \{0, 1, 2\}$
$S4 = \{a, ab\}$
$S5 = \{a, b, c\}$
$S6 = \{c\}$

5

What is the Cartesian product (X) of S1 and S6?

{ac, bc}

ac, bcgabe

{(a, c), (b, c)}

hello jono

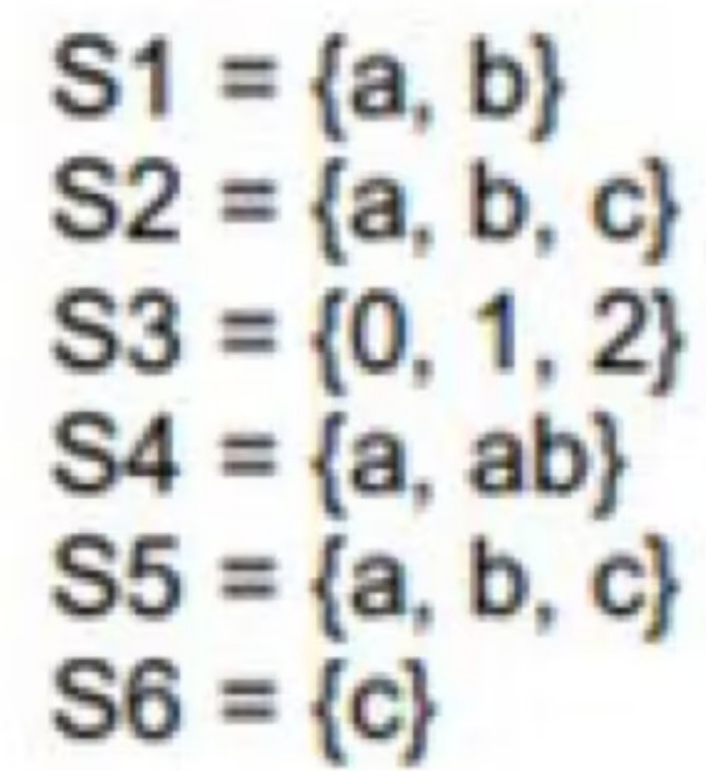
{{a,c), (b,c)}

varbiel

ab*c

You can submit multiple answers

Figure 3



Write a Regular Expression for expressions that start with the letter a, end with the letter c and have one or more b's in the middle i.e. abc, abbc

Mentimeter

ab+c

Short answers are recommended.
You have 200 characters left.

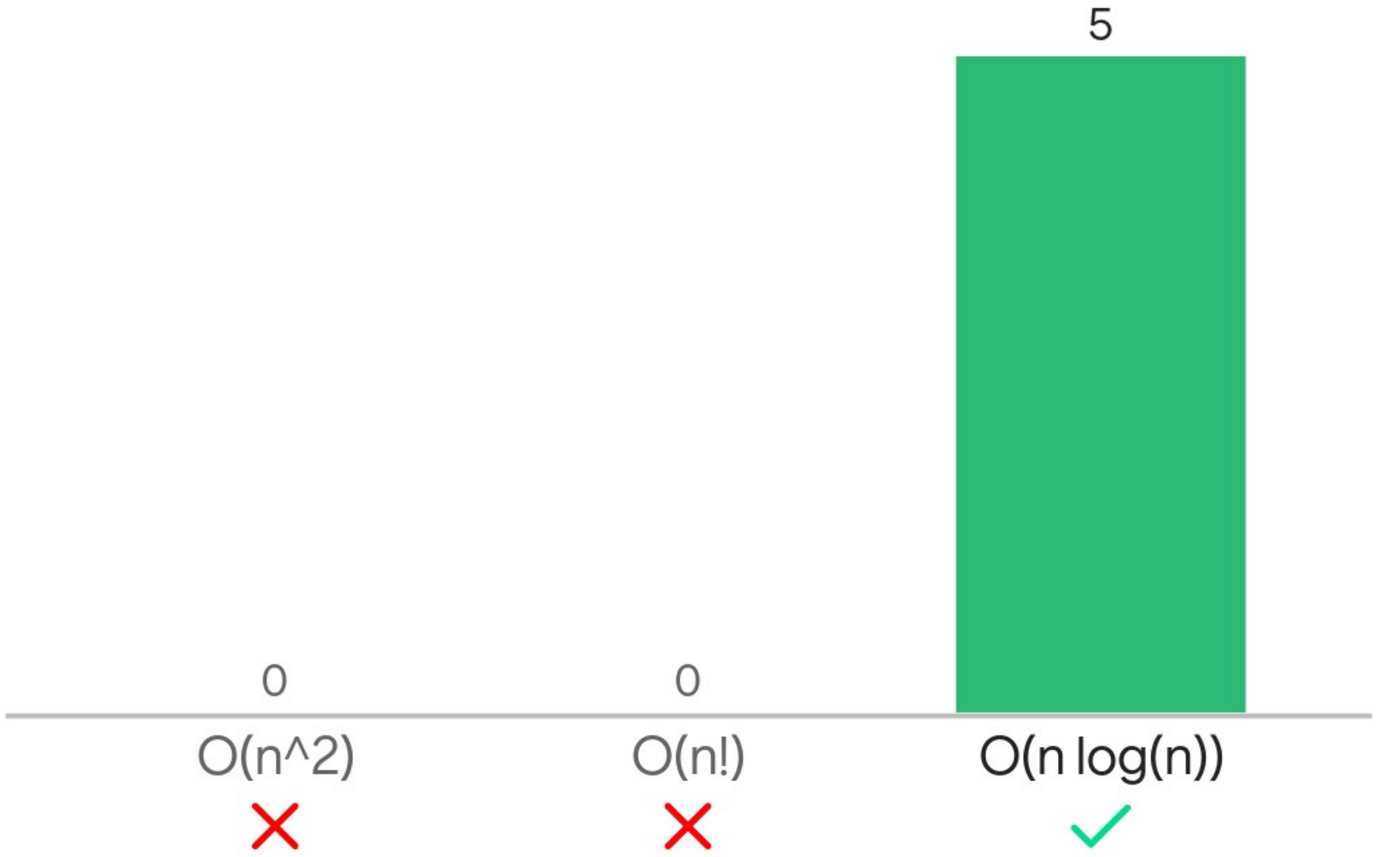
ab*c

a b+ c

ab+c

Which is the best time complexity listed below?

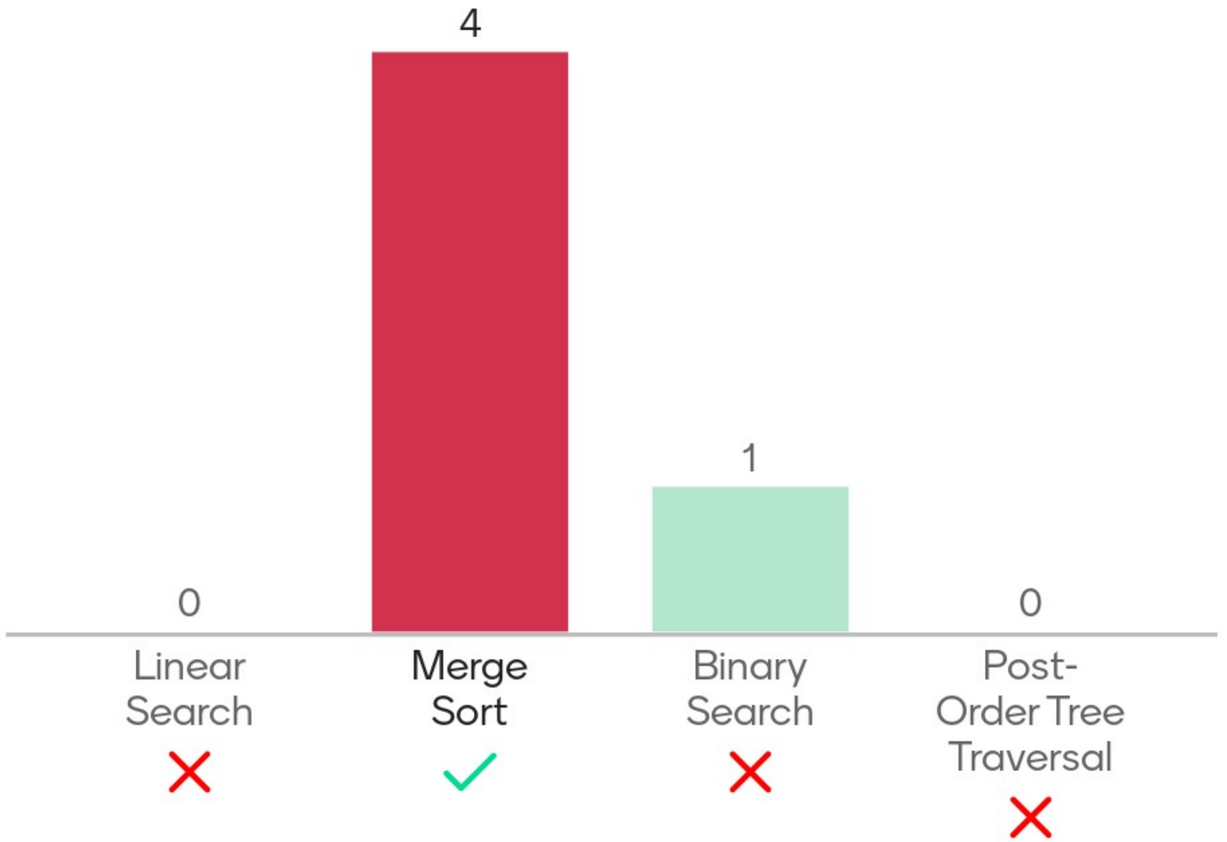
Mentimeter



5

Which of the following algorithms has O(n log(n)) complexity?

Mentimeter



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What is meant by an Intractable Problem?

Mentimeter

this is a problem that cannot be solved within a polynomial time complexity

a problem that takes too much time to be effective

a problem that cannot be solved in a polynomial time complexity or less

A problem that can only be solved by algorithms of exponential time complexity or worse

Short answers are recommended. You have 200 characters left.

has polynomial time complexity

andrew <3

5

What is meant by a Universal Turing machine?

Mentimeter

A theoretical Turing machine that can solve any problem

a machine that was made by Turing that is universal

Turing machine can simulate any function used in a programming language

can slove algorithms of all types

A Universal Turing Machine is a theoretical machine that is capable of performing any computation that can be performed by any other Turing machine. - chat gpt

aamile always cheating

Short answers are recommended. You have 200 characters left.

aamile stop searching

gabe always pirating

4

What is meant by a Universal Turing machine?

Mentimeter

classic aamile	thats andrew not me lol	what
a	a	a
a	a	a

4

What is meant by a Universal Turing machine?

Mentimeter

a

a

a

a

a

4