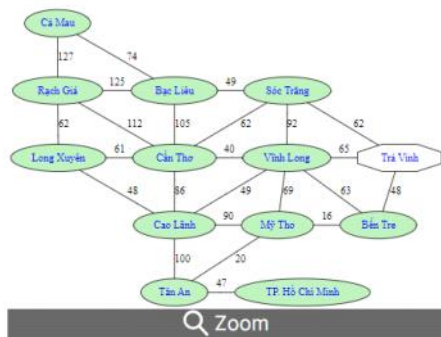


## Quiz 3

Friday, March 15, 2024 7:45 AM

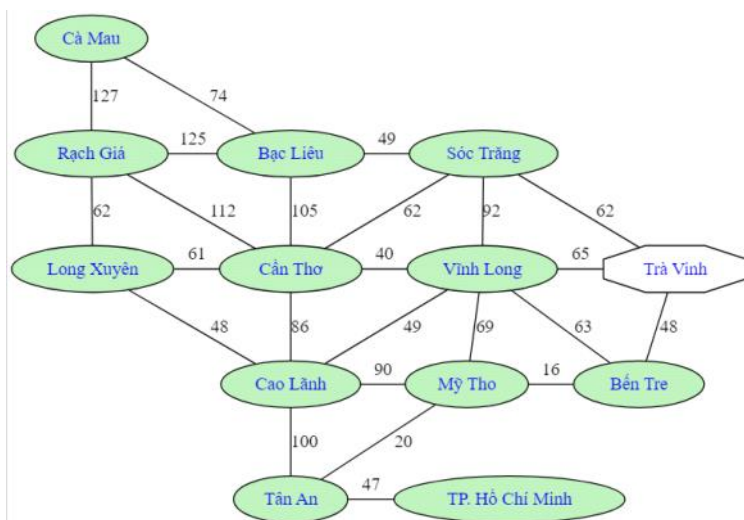
1 of 10

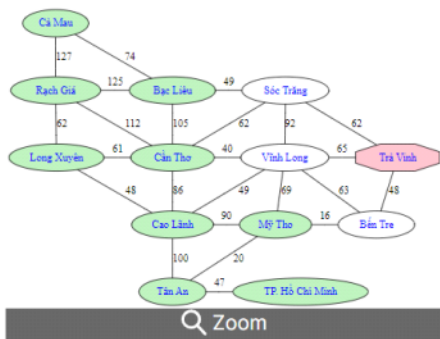


We need to find a path to go from Trà Vinh to Hồ Chí Minh city. Which of the following nodes will be put in the frontier after expanding node "Trà Vinh"?

- ☐ A Sóc Trăng
- ☐ B Vĩnh Long
- ☐ C Bến Tre
- ☒ D All of the above

SUBMIT ANSWER





Sóc Trăng, Vĩnh Long, and Bến Tre are in the current frontier. Using Depth-first search, which one of the following nodes can be chosen to expand next?

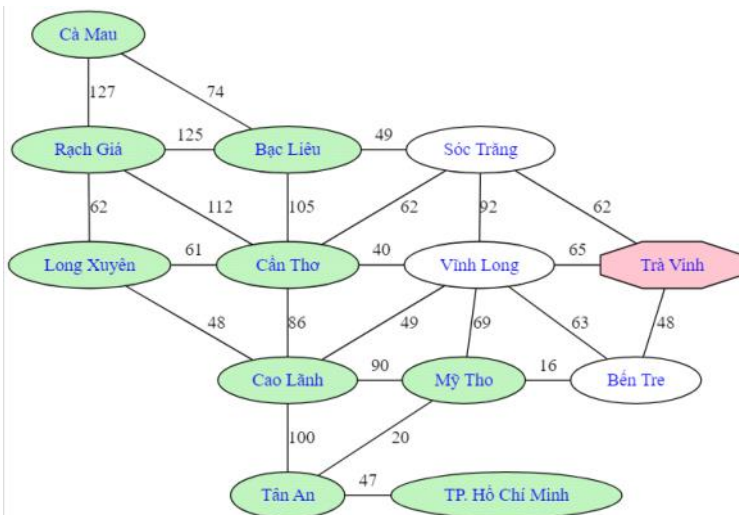
A Sóc Trăng

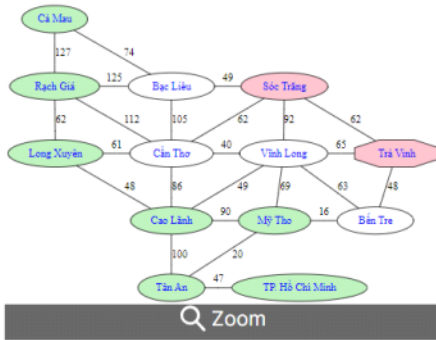
B Vĩnh Long

C Bến Tre

D Any of the above nodes can be randomly chosen.

SUBMIT ANSWER

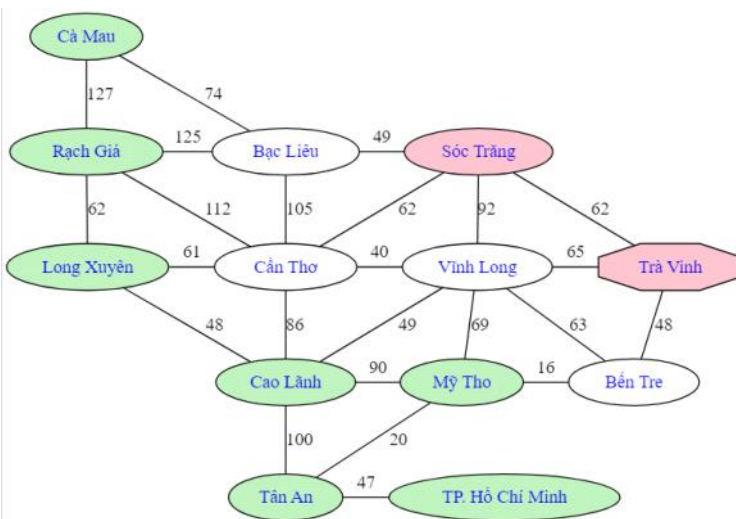


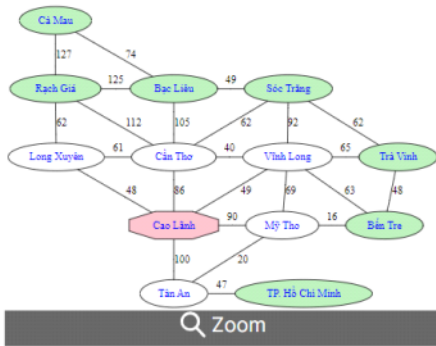


After expanding Sóc Trăng node, we have Bạc Liêu, Cần Thơ, Vĩnh Long, and Bến Tre in the current frontier. If Breadth-first search is used, which one of the following nodes can be chosen to expand next?

- A** Vĩnh Long
- B** Bến Tre
- C** Vĩnh Long or Bến Tre can be chosen.
- D** Bạc Liêu or Cần Thơ can be chosen.

SUBMIT ANSWER

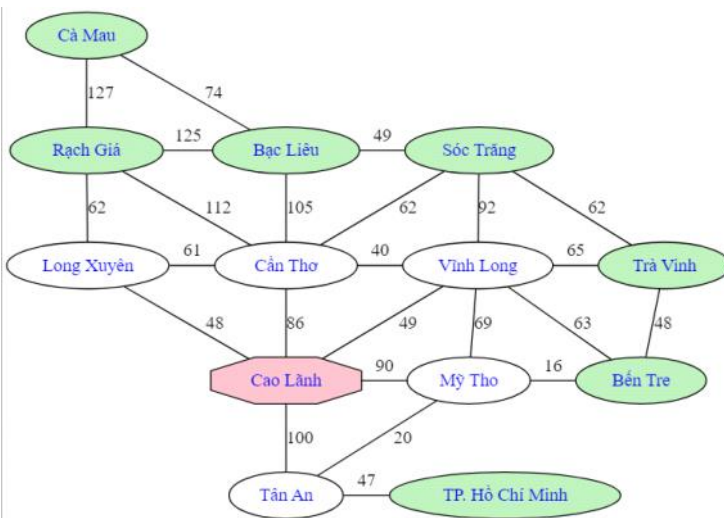


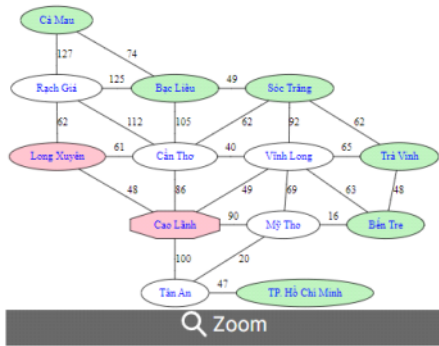


We now use Uniform-cost search to find a path from Cao Lãnh to Hồ Chí Minh city. After expanding Cao Lãnh node, the current frontier contains Tân An, Mỹ Tho, Vĩnh Long, Cần Thơ and Long Xuyên. Which node will be chosen to expand next?

- A** Tân An
- B** Mỹ Tho
- C** Vĩnh Long
- D** Cần Thơ
- E** Long Xuyên

SUBMIT ANSWER





We still use Uniform-cost search to find a path from Cao Lãnh to Hồ Chí Minh city. The current frontier now contains Rạch Giá, Cần Thơ, Vĩnh Long, Mỹ Tho, and Tân An. Which node will be chosen to expand next?

A Rạch Giá

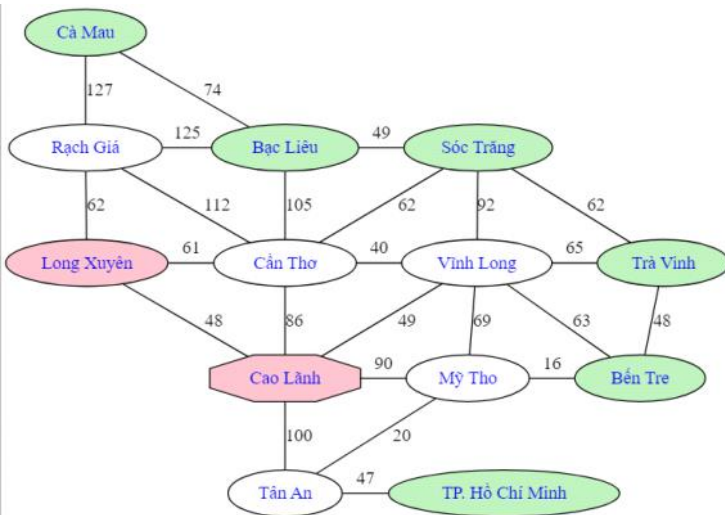
B Cần Thơ

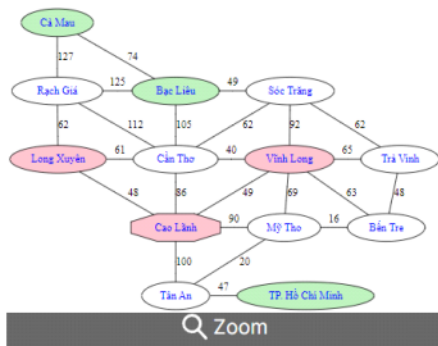
C Vĩnh Long

D Mỹ Tho

E Tân An

SUBMIT ANSWER

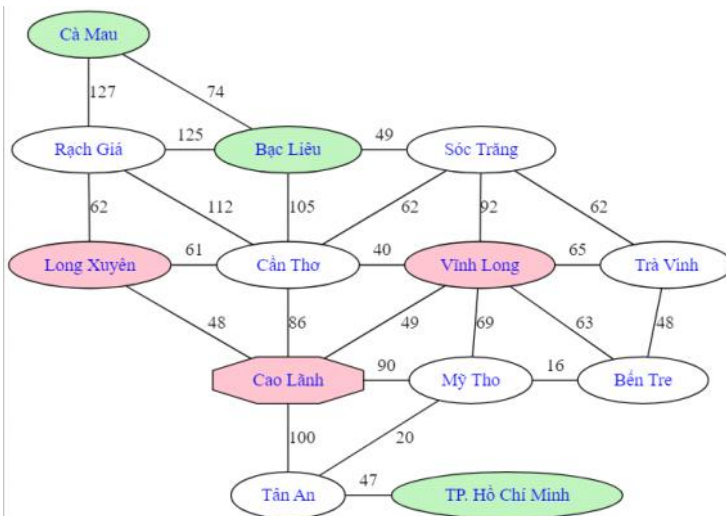


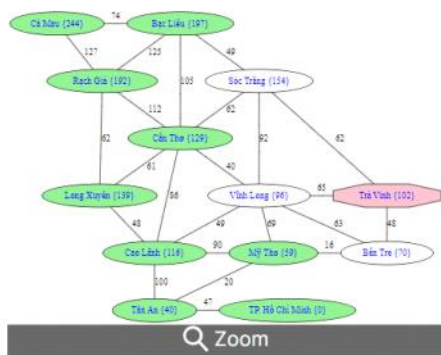


We still use Uniform-cost search to find a path from Cao Lãnh to Hồ Chí Minh city. After expanding the node Vĩnh Long, the current frontier contains white nodes. Which node will be chosen to expand next?

- |                         |          |                                    |           |
|-------------------------|----------|------------------------------------|-----------|
| <input type="radio"/> A | Rạch Giá | <input checked="" type="radio"/> B | Cần Thơ   |
| <input type="radio"/> C | Tân An   | <input type="radio"/> D            | Sóc Trăng |
| <input type="radio"/> E | Trà Vinh | <input type="radio"/> F            | Mỹ Tho    |
| <input type="radio"/> G | Bến Tre  |                                    |           |

SUBMIT ANSWER

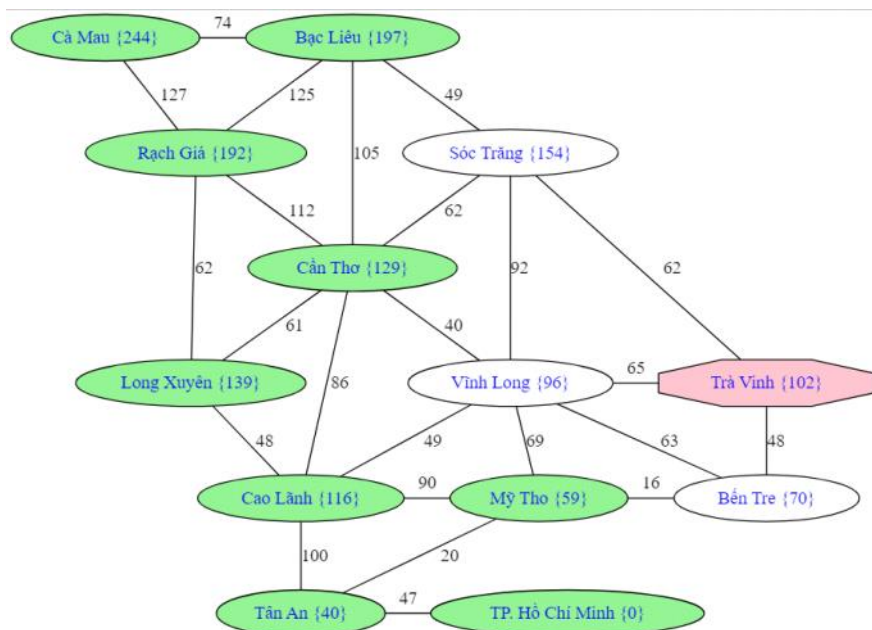




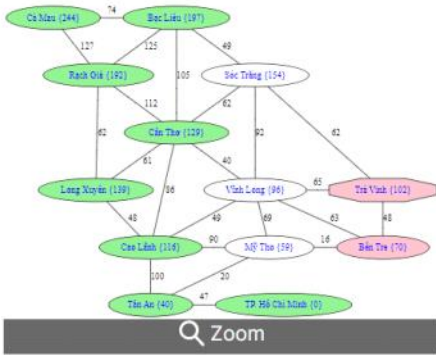
The numbers in the brackets { } are the straight-line distances from the current cities to Hồ Chí Minh city. We now use Greedy Best-first search to find the path from Trà Vinh to Hồ Chí Minh city. Which of the following nodes will be chosen to expand next?

- ☐ A Sóc Trăng
- ☐ B Vĩnh Long
- ☒ C Bến Tre
- ☐ D Any of the above nodes can be randomly chosen.

**SUBMIT ANSWER**



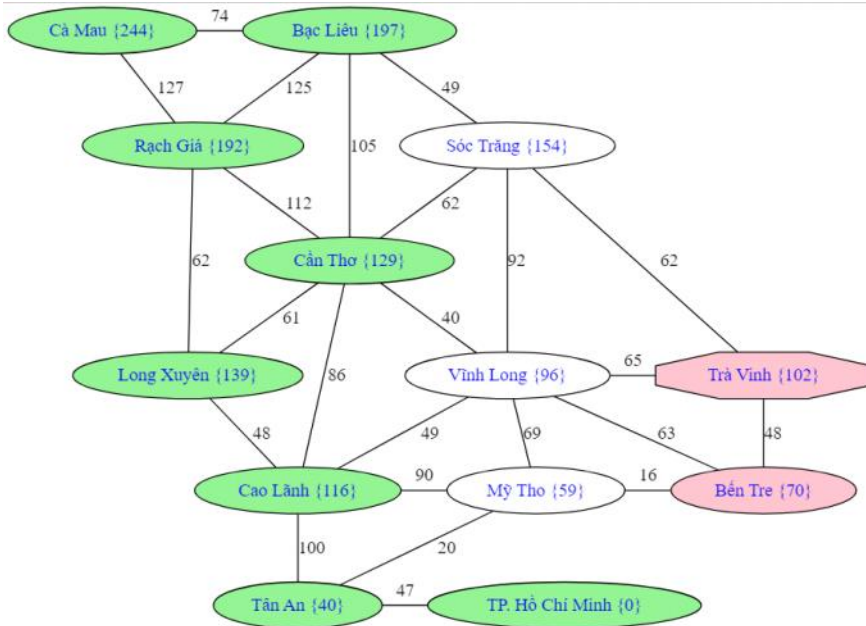




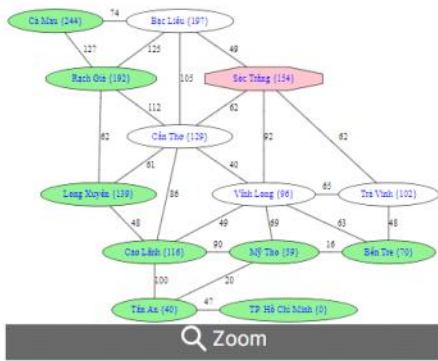
Using Greedy Best-first search, which of the following nodes in the current frontier will be chosen to expand next?

- ☒ A Mỹ Tho
- ☐ B Sóc Trăng
- ☐ C Vĩnh Long
- ☐ D Any of the above nodes can be randomly chosen.

SUBMIT ANSWER



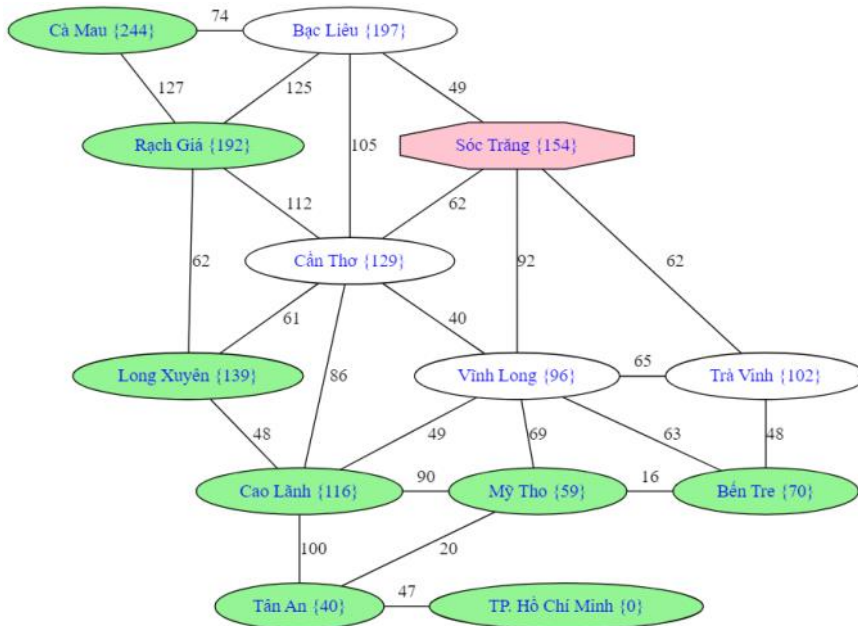


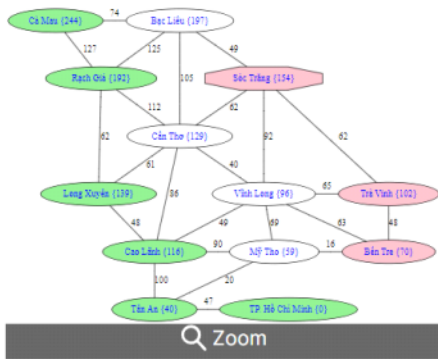


We now use A\* search to find a path from Sóc Trăng to Hồ Chí Minh city. The current frontier contains Bạc Liêu, Cần Thơ, Vĩnh Long, and Trà Vinh. The numbers in the brackets { } are the straight-line distances between the corresponding cities and Hồ Chí Minh city. Which of following nodes will be chosen to expand next?

- A Bạc Liêu
- B Cần Thơ
- C Vĩnh Long
- D Trà Vinh

SUBMIT ANSWER





We still use A\* search. The current frontier contains Bạc Liêu, Cần Thơ, Vĩnh Long, and Mỹ Tho. Which of the following cities will be chosen to expand next?

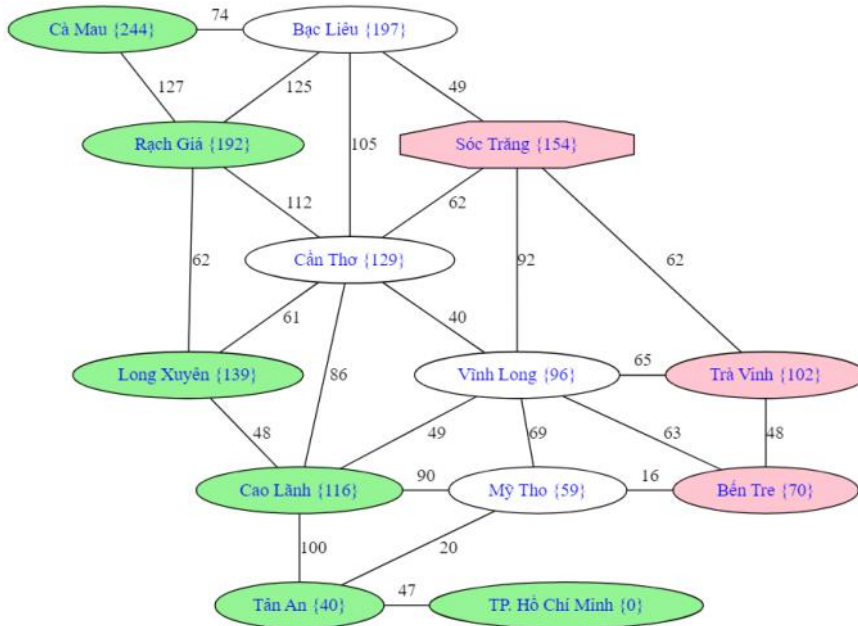
A Mỹ Tho

B Vĩnh Long

C Bến Tre

D Cần Thơ

SUBMIT ANSWER



Finished!

Score: 10/10

Percent: 100%

OK