AQ10.3: Activity Question 3 - Not Graded

**This assignment will not be graded and is only for practice.**

**Note : This activity is for your practice purpose only. Your score in this will not count towards the Final score.**

***1 point***

Consider the procedure DirectRoutes**DirectRoutes** explained in the lecture. What are the keys of the dictionary, stations**stations** used in the same procedure? [MSQ]

All the stations in the stations dataset

All the stations which are either a starting point or an ending point of any train

Only the stations which are starting points of trains

Only the stations which are ending points of the trains

How many keys are there in the dictionary, trains**trains**[12259] used in the procedure DirectRoutes**DirectRoutes**?

***1 point***

***1 point***

If n**n** is the length(keys(stations))**length**(**keys**(**stations**)) then what will be the value of A**A** after the execution of the following pseudocode? Here stnindex**stnindex** is the dictionary which is described in the procedure DirectRoutes**DirectRoutes**.  
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AI-generated content may be incorrect.

n**n**

n**n** - 1

n(n−1)22**n**(**n**−1)​

n(n+1)22**n**(**n**+1)​

None of the above

***1 point***

Consider the matrix direct**direct** discussed in the procedure DirectRoutes**DirectRoutes**. Choose the correct statement(s) about the matrix ?[MSQ]

If direct[i][j]**direct**[**i**][**j**] is 1, then there is a direct connection from station i**i** to station j**j**.

If direct[i][j]**direct**[**i**][**j**] is 1, then there is a direct connection from station j**j** to station i**i**.

direct[i][j]**direct**[**i**][**j**] will be zero if there is no direct connection from station i**i** to station j**j**.

direct[i][j]**direct**[**i**][**j**] will be zero if there is no direct connection from station j**j** to station i**i**.

***1 point***

Consider the procedure OneMoreHop(direct,nhops)**OneMoreHop**(**direct**,**nhops**) discussed in the lecture. If the value of onemorehop[i][j]**onemorehop**[**i**][**j**] is 1 then choose the correct statement about the matrix ?

The passenger can travel from station i**i** to station j**j** in at least n**n** trains

The passenger can travel from station i**i** to station j**j** in at most n**n** trains

The passenger can travel from station i**i** to station j**j** in exactly n**n** trains

The passenger can travel from station i**i** to station j**j** in at most n**n**+1 trains

The passenger can travel from station i**i** to station j**j** in exactly n**n**-1 trains