CPSC 217 Exercise 6: Where Are You?

Due: Monday June 10, 2024 at 11:55pm

Task:

Canadian postal codes consist of 6 characters. The first, third and fifth characters are letters while the second, fourth and sixth characters are digits. Postal codes are grouped by province, with the first letter in the postal code identifying the province or territory. Subsequent digits identify a smaller area within the province or territory. The following table shows the first letter(s) used by each province:

Province	**First Letter(s)**
Alberta	T
British Columbia	V
Manitoba	R
New Brunswick	E
Newfoundland	A
Nova Scotia	B
Nunavut or Northwest Territories	X
Ontario	K, L, M, N and P
Prince Edward Island	C
Quebec	G, H and J
Saskatchewan	S
Yukon	Y

Write a program that reads a postal code from the user and displays the name of the province in which that postal code resides. **Your program cannot include any if statements, loops or lists.** As a result, you will almost certainly want to use a dictionary to solve this problem.

Your program does not need to do any error checking. The user will always enter a 6 character postal code that begins with one of the letters indicated in the previous table.

Sample Input and Output:

Run #1:

```
Enter a 6 character postal code (A1A1A1): A1A1A1
That postal code resides in Newfoundland
```

Run #2:

```
Enter a 6 character postal code (A1A1A1): T2N1N4
That postal code resides in Alberta
```

Run #3:

```
Enter a 6 character postal code (A1A1A1): X1Y2Z3
That postal code resides in Nunavut or Northwest Territories
```

Run #4:

```
Enter a 6 character postal code (A1A1A1): M0P9Q9
That postal code resides in Ontario
```

Run #5:

```
Enter a 6 character postal code (A1A1A1): N3C4J2
That postal code resides in Ontario
```

Grading:

Your program will be graded by testing it with four different sets of input, which may be different from the examples shown above. **A program that includes an if statement, loop or list will receive a grade of F even if all of the output is correct.**

Submission Instructions:

Submit your solution as a Python source code file electronically to the Exercise 6 drop box in D2L. You do **not** need to submit a paper copy of your solution. If you choose to complete this exercise as part of group then each member of the group must submit a copy of the exercise using D2L.