

Name: \_\_\_\_\_ ID: \_\_\_\_\_ Section: \_\_\_\_\_

## Question 1 [CO1] [10 Points]

You have to write a function named **generate\_course()** which will take a course code and name in a single string. You have to extract the course code and title and create a new course based on those.

- If the existing code's **last digit is even**, set the course code and title as 'Invalid Code' and 'Invalid Title', respectively.
- If the course code's last digit is **odd**:
  - For the new course code, increase the course code number by 1 (CSE331 changes to CSE332).
  - For the new course title, each odd-indexed character will turn into the next alphabetical character. ( Automata changes to Aytpmbtb )
- Finally, return a tuple with the new course code and title in it. Print those **outside the function** by tuple unpacking.

Sample Function Call	Sample Output
generate_course('CSE331 Automata')	New Course: Title: Avtpmbtb Code: CSE332
generate_course('CSE447 Security')	New Course: Title: Sfcvrjtz Code: CSE448
generate_course('CSE420 Compiler')	New Course: Title: Invalid Title Code: Invalid Code