

Lab Review

10 points

1. Create a new Java project **reviewActivity** with a class **GradesArray** with a **main method**.

- Write a program that prompts a user to **enter the number** of courses taken.
- For **each** course, get the following information from the user using a **for loop**:
 - course name
 - course credit hours
 - numerical score for the course
- Each of the above values should be stored in an **array** (see **hint** below)
 - names should all be stored in a *names* array
 - credit hours in a *credits* array
 - scores in a *scores* array
 - *They should be added to the arrays in the same order they are asked—the first course's name should be first element in the names array, the first course's credit hours should be first element in credits array, the first course's score should be first element in the scores array. The second course's values should be the second element in the arrays, etc.
- There should also be a fourth array, *grades*.
 - The *grades* array should be filled by looping through the *scores* array and, for each element (score) in the *scores* array
 - determine its equivalent letter grade (90 - 100 = A, 80 - 89 = B, etc.)
 - add that letter grade to the *grades* array
- Finally, print to console a **table** with the headers *Course*, *Hours*, *Score*, *Grade* followed by their respective values in the columns beneath

Example output:

```
Enter number of courses:
5
Enter course 1 name:
CS121
Enter course 1 credit hours:
4
Enter course 1 score:
98
Enter course 2 name:
CS124
Enter course 2 credit hours:
3
Enter course 2 score:
87
Enter course 3 name:
ENG104
Enter course 3 credit hours:
3
Enter course 3 score:
75
Enter course 4 name:
Math213
Enter course 4 credit hours:
3
Enter course 4 score:
68
Enter course 5 name:
BIO100
Enter course 5 credit hours:
4
Enter course 5 score:
57

Course Hours Score Grade
CS121 4 98 A
CS124 3 87 B
ENG104 3 75 C
Math213 3 68 D
BIO100 4 57 F
```

Hint: arrays need to have a fixed number of items, so fix the value after you ask the user for the number of courses, as that will also be the number of items in your array.

***Push the files to GitHub for review. ***