Assignment 3

BUSA 523

due: Feb 14th, 11:59 PM

1. Create a class to store student records. Each student has a first name, last name, country, overall grade (0 - 4.0 scale), credits completed (total 30) and major. Create a method within this class to evaluate student progress. **(20)**

   Progress is evaluated as follows:

   - **"Good":** if grades are above 3.0 **and** credits completed is greater than 20
   - **"Average":** if grades are above 2.5 **or** credits completed is between 10 and 20
   - **"Bad":** if grades **are** below 2.5

2. Write a function which separates the positive and negative numbers from a list of numbers. **(20)**

   Input: *[-6, 5, -3, -2, 1, 0, -8, 9, 3]*
   Output: *[-6, -3, -2, -8], [5, 1, 9, 3]*

3. Write a function which outputs all winning possibilities for a given player's score. Assume the score is always between 15 and 21. Further, the dealer is dealt only 2 cards. **(40)**

   Input - 18 (player's final score)
   Output - [(9,10), (10,11), (10,10), (11,9), (11,8)]
   Notes:
   - No need to specify face cards separately, you can use the value "10"
   - (11,11) is not a winning combination

   https://u.osu.edu/sdp12d1/user-manual/ (BlackJack - rules)

4. Calculate the number of steps & Big O order for the programs in question 2 and 3. **(20)**