

# CSE 708 Application of Data Analytics and Engineering

Fall 2023

## Assignment 1: Python Pandas

*Due on Friday September 22, 2023 at 11:59 PM*

1. **(10pts)** Write a python program using pandas to create and display a one-dimensional array-like object containing an array of all ten numerical digits.
2. **(10 pts)** Transform the object in 1, to a list.
3. **(10 pts)** Using python change, this dictionary into a pandas series

`{'a': 100, 'b': 200, 'c':300, 'd':400, 'e':800}`

**In the next questions use the data frame below:**

	name	score	attempts	qualify
a	Anastasia	12.5	1	yes
b	Dima	9.0	3	no
c	Katherine	16.5	2	yes
d	James	NaN	3	no
e	Emily	9.0	2	no
f	Michael	20.0	3	yes
g	Matthew	14.5	1	yes
h	Laura	NaN	1	no
i	Kevin	8.0	2	no
j	Jonas	19.0	1	yes

4. **(20 pts)** Using Pandas, sort this data frame by name in descending order and score in ascending order.
5. **(10pts)** Using Pandas write a code to print the names of students whose scores were not recorded.
6. **(20 pts)** Using pandas write a code to print the names of the students who attempted the exam twice **at least**.
7. **(20 pts)** Using pandas print the names and respective scores of the students who were qualified at their first attempt.