

**Submission:**

- You must submit all your work in one “jupyter notebook” with your Name and ID in the first cell. Then upload your notebook file into the JUST *e-learning* system.

**Requirements:**

- [10 Points] Write one jupyter cell to evaluate all of the following expressions, make sure to run the cell before submission.

Expression	Result
<code>print("CS"+"is"+"fun")</code>	
<code>print("CS" + (2 * 'is' + "fun"))</code>	
<code>print('Double "')</code>	
<code>print('Single \')</code>	
<code>print('Single ''')</code>	
<code>print('A' + 'ok')</code>	
<code>print('A' + str(eval('4 // 2')))</code>	
<code>print('A' * 4)</code>	
<code>print('A' + str(4//2))</code>	
<code>print('A' + repr(4//2))</code>	

2. [20 Points] Write one jupyter cell to evaluate all of the following expressions, make sure to run the cell before submission. Assume that `s = 'Hello World!'`

Expression	Result
<code>print(s[1])</code>	
<code>print(s[1:5])</code>	
<code>print(s[:5])</code>	
<code>print(s[5:])</code>	
<code>print(s[50:100])</code>	
<code>print(s[-1])</code>	
<code>print(s[-1:5])</code>	
<code>print(s[:-5])</code>	
<code>print(s[-5:-1])</code>	
<code>print(s[-1:-2:-1])</code>	
<code>print(s[-1:-5:-2])</code>	
<code>print(s[0:-5])</code>	
<code>print(s[-100:0:-1])</code>	
<code>print('e' in s)</code>	
<code>print('x' in s)</code>	
<code>print(s.index('e'))</code>	
<code>print(s.index('l',5))</code>	
<code>print(s.find('e'))</code>	
<code>print(s.find('x'))</code>	
<code>print(s.count('o'))</code>	

3. [20 Points] Write one jupyter cell to evaluate all of the following expressions, make sure to run the cell before submission.

**Assume that** `alist = ['H','e','l','l','o',' ','W','o','r','l','d','!']`

Expression	Result
<code>alist.remove('o')</code> <code>print(alist)</code>	
<code>alist.remove('x')</code> <code>print(alist)</code>	
<code>pos = alist.index('o')</code> <code>print(pos)</code>	
<code>pos = alist.index('B')</code> <code>print(pos)</code>	
<code>alist[0] = 'J'</code> <code>print(alist)</code>	
<code>alist.insert(4,'o')</code> <code>print(alist)</code>	
<code>s = alist[:]</code> <code>print(s)</code>	
<code>s[0] = 'C'</code> <code>print(s)</code> <code>print(alist)</code>	
<code>a = '-'.join(s)</code> <code>print(a)</code> <code>print(len(a))</code>	
<code>a = ''.join(s)</code> <code>print(a)</code> <code>print(len(a))</code>	
<code>L = list(a)</code> <code>print(L)</code> <code>print(len(L))</code>	
<code>t = tuple(L)</code> <code>print(t)</code> <code>print(len(t))</code>	
<code>s = set(t)</code> <code>print(s)</code> <code>print(len(s))</code>	