Lab 1 Solutions

Summer Session A, 2023, Ethan M.

June 22, 2023

1 Task 2

```
[1]: 2 + 2
```

```
[1]: 4
```

2 Task 3

```
[2]: 2 plus 2
```

```
  Cell In[2], line 1
    2 plus 2
          ^
SyntaxError: invalid syntax
```

3 Task 4

```
[3]: (2 + 3) / (4 + 5 ** 6)
```

```
[3]: 0.0003199181009661527
```

```
[4]: (1 - 3 * 4 ** 5) ** 6
```

```
[4]: 838839550121163601921
```

4 Task 5

```
[5]: sin(1)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[5], line 1
----> 1 sin(1)
```

```
NameError: name 'sin' is not defined
```

[6]: `from math import *`

[7]: `sin(1)`

[7]: 0.8414709848078965

5 Task 6

[8]: `my_variable = 5`

[9]: `print(My_variable) # should return error`

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[9], line 1
----> 1 print(My_variable) # should return error

NameError: name 'My_variable' is not defined
```

6 Task 8

[10]: `type(1)`

[10]: int

[11]: `type(1.1)`

[11]: float

[12]: `type("hello")`

[12]: str

7 Task 9

[13]:
```
course = "PSTAT 5A"
num_sections = 4
section_capacity = 25
```

[14]: `num_sections = num_sections + 1`

```
[15]:  # type(course) should return 'str'
       # type(num_sections) should return 'int'
       # num_sections * section_capacity should return 125
```

```
[16]:  type(course)
```

```
[16]:  str
```

```
[17]:  type(num_sections)
```

```
[17]:  int
```

```
[18]:  num_sections * section_capacity
```

```
[18]:  125
```

```
[19]:  course_capacity = num_sections * section_capacity
```