Lab01

Solutions, compiled by Ethan

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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]:
```python
from math import *
```

[7]:
```python
sin(1)   # computes sin(1)
```

[7]: 0.8414709848078965

5   Task 6

[8]:
```python
my_variable = 5
print(My_variable)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[8], line 2
      1 my_variable = 5
----> 2 print(My_variable)

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

6   Task 8

[9]:
```python
type(1)
```

[9]: int

[10]:
```python
type(1.1)
```

[10]: float

[11]:
```python
type("hello")
```

[11]: str

7   Task 9

[12]:
```python
course = "PSTAT 5A"
num_sections = 4
section_capacity = 25
```

[13]:
```python
num_sections = num_sections + 1
```

```
[14]: # type(course) should be 'str'
      # type(num_sections) should be 'int'
      # num_sections * section_capcity should be 125
```

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

```
[15]: str
```

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

```
[16]: int
```

```
[17]: num_sections * section_capacity
```

```
[17]: 125
```