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Problem Set 1

Code (.py)

```
# -*- coding: utf-8 -*-
"""
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"""

# 1
print("Output for question 1.")
print(2) # '2'
print(3**2) # 9
print(7//3) # 2
print(7/3) # 2.3333
print(7%3) # 1
print(2+2) # 4
print(10*2) # 20
print()

#2
print("Output for question 2.")
Name1 = 'Kentucky '
Name2 = "Wildcats"
#What is the output from each of the following lines of command? Verify your answers in Spyder.
print(type(Name1)) # str
print(type(Name2)) # str
```

```
print(Name1+Name2) # Kentucky Wildcats
print(Name2+Name1) # WildcatsKentucky
print(Name2+' @ '+Name1) # Wildcats @ Kentucky
print(3* Name2) # WildcatsWildcatsWildcats
print()

#3
print("Output for question 3.")
x=3.458
y=-2.35
# what is the result for each of the following?
print(type(x)) # float
print(type(y)) # float
print(round(x,2)) # 3.46
print(round(y,1)) # -2.4
print(round(x,0)) # 3.0
print()

#4
print("Output for question 4.")
a=57
b=-3
c=0
# What is the outcome from each of the following?
print(type(b)) # int
print(str(a)) # '57'
print(float(c)) # 0.0
print()
```

```
#5
print("Output for question 5.")
print(type(5==9)) # bool
print('8<7') # '8<7'
print(5==9) # False
print(type('5==9')) # str
print(type('8<7')) # str
print(type('True')) # str
print()

#6
print("Output for question 6.")
print(int(-23.0)) # -23
print(int("56")) # 56
print(int(-2.35)) # -2
print(str(-23.0)) # '-23.0'
print(float(8)) # 8.0
print()

#7
print("Output for question 7.")
print(int(True)) # 1
print(float(False)) # 0.0
print(str(False)) # 'False'
print()

#8
print("Output for question 8.")
print(bool(0)) # False
```

```
print(bool(-23)) # True
print(bool(17.6)) # True
print(bool('Python')) # True
print()

#9
print("Output for question 9.")
print("global # no reserved keyword in python.")
print("2print # no starts with a number instead of letter or underscore.")
print("print2 # yes")
print("_squ # yes")
print("list # no built in function")
print()

#10
print("Output for question 10.")
for letter in ("A", "B", "C"):
    if letter == "B":
        break
    for num in (1, 2):
        print(f"this is {letter}{num}") # A1 A2
print()

#11
print("Output for question 11.")
for letter in ("A", "B", "C"):
    if letter == "B":
        continue
    for num in (1, 2):
```

```
        print(f"this is {letter}{num}") # A1 A1 C1 C2
print()

#12
print("Output for question 12.")
for letter in ("A", "B", "C"):
    if letter == "B":
        pass
    for num in (1, 2):
        print(f"this is {letter}{num}") # all
print()

#13
print("Output for question 13.")
for letter in ("A","B"):
    for num in (1,2):
        print(f"this is {letter}{num}") # A1 A2 B1 B2
```

Output

```
Output for question 1.
2
9
2
2.3333333333333335
1
4
20
```

Output for question 2.

<class 'str'>

<class 'str'>

Kentucky Wildcats

WildcatsKentucky

Wildcats @ Kentucky

WildcatsWildcatsWildcats

Output for question 3.

<class 'float'>

<class 'float'>

3.46

-2.4

3.0

Output for question 4.

<class 'int'>

57

0.0

Output for question 5.

<class 'bool'>

8<7

False

<class 'str'>

<class 'str'>

<class 'str'>

Output for question 6.

-23

56

-2

-23.0

8.0

Output for question 7.

1

0.0

False

Output for question 8.

False

True

True

True

Output for question 9.

global # no

2pirnt # no

print2 # yes

_squ # yes

list # no

Output for question 10.

this is A1

this is A2

Output for question 11.

this is A1

this is A2

this is C1

this is C2

Output for question 12.

this is A1

this is A2

this is B1

this is B2

this is C1

this is C2

Output for question 13.

this is A1

this is A2

this is B1

this is B2