# Practice simple if/else

**Directions:** Write your Python code on Replit and then copy your code here

**Remember: For some exercises,** you may need to declare and assign a value to a variable to use that variable in the conditional statement

1. x = 2   y = 5   z = 0
   Find values of the following expressions:

| Expression | Result |
|---|---|
| x == 2 | True |
| x != 5 | True |
| x != 5 and y >= 5 | True |
| z != 0 or x == 2 | True |
| not y < 10 | False |

2. Write a conditional statement that checks if the season (variable) is "winter", "summer", "spring" or "fall", and print the activity you do during that season. For example, if the season is "summer", you should print something like this: "I go to the beach".

```
season = "summer"

if season == "summer":
    print("I go to the beach")
```

**Output:**
I go to the beach

3. Write a conditional statement that checks if it is rainy. If it is rainy, print "I stay home". Otherwise, print an outside activity you do when it is not rainy.

```
rainy = False

if rainy:
    print("I stay home")
else:
    print("I go to the park")
```

**Output:**
I go to the park

4. If a player scores 500 or more points playing a game, he goes to the next level. If the score is below 500 the player does not pass to the next level

```
score = 500

if score >= 500:
    print("Go to the next level")
else:
    print("Keep trying")
```

**Output:**
Go to the next level

5. A company decides to give an employee a bonus of 5% of the salary if his/her years of service are more than 5 years. Otherwise, the bonus is 2%.
Create a salary variable and another for the years of service and print the net amount that the employee receives (salary + payment).

```
salary = 2000
years_service = 4

if years_service > 5:
    percentage = 5
else:
    percentage = 2

print("The net payment is", salary + salary * percentage /100)
```

6. Assign values of the length and width of a rectangle and check if it is square or not.

```
length = 5
width = 5

if length == width:
    print("It is a square")
else:
    print("It is not a square")
```

**Output:**
It is a square

7. A shop will give a discount of 20% if the cost of the quantity purchased is more than $100. Otherwise, the discount is only 10%. Print the total amount the shopper has to pay.

```
total = 200

if total > 100:
    discount = 20
else:
    discount = 10

print("The shopper has to pay:", total - total * discount / 100)
```

**Output:**
The shopper has to pay: 160.0