

Task 1: Rewrite this line so it's valid:

if species = "cat":

```
In [ ]: 1 if species == "cat":
```

Task 2: Code the first line of an if statement that tests whether x has the same value as y

```
In [2]: 1 if x == y:
```

Task 3: On line 1, test whether a has the same value as b. On line 2, write that c equals d. Don't forget to indent the second line.

```
In [ ]: 1 if a == b:
        2     c = d
```

Task 4: If total has the value of 100, then tax has the value of 2. Code both lines. Don't forget to indent the second line.

```
In [ ]: 1 if total == 100:
        2     tax = 2
        3
```

Task 5: If first_name is "Sherlock", then last_name is equal to "Holmes" and pal is equal to "Watson". Code all three lines.

```
In [ ]: 1 if first_name == "Sherlock":
        2     last_name = "Holmes"
        3     pal = "Watson"
```

Task 6: Ask user to Enter "yes" or "no". If user entered "yes" tell Python to print "congrats", if

“no”. tell python to print “better luck next

```
In [18]: 1 keyword=input('enter the asked keywords----')
          2
          3 if keyword=='yes':
          4     print('congrats')
          5 elif keyword=='no':
          6     print('better luck next time')
          7 else:
          8     print('invalid input')
```

enter the asked keywords----yes
congrats

Task 7: Code the first line of an if statement testing whether the variable total is less than 100.

```
In [ ]: 1 if total<100:
```

Task 8: Write a program:Ask user to enter a value in range of 1 -> 1000.if the value is greater than 500, then write “greater than 500” else write “smaller than 500”.

```
In [22]: 1 value= int(input("Enter a value in the range of 1 to 1000: "))
          2
          3 if value > 500:
          4     print("Greater than 500")
          5 else:
          6     print("Smaller than 500")
          7
```

Enter a value in the range of 1 to 1000: 455
Smaller than 500

Task 9: Code if statement that tests whether the Difference of a and b (take input from user) is greater than or equal to c= - 7.

```
In [24]: 1 a = int(input("Enter the value of a: "))
2 b = int(input("Enter the value of b: "))
3 c = -7
4
5 if (a - b) >= c:
6     print("The difference between a and b is greater than or equal to -7.")
7 else:
8     print("The difference between a and b is smaller than -7.")
9
```

Enter the value of a: 1

Enter the value of b: 19

The difference between a and b is smaller than -7.

Task 10: Write an if statement that tests whether a variable is smaller than 99. If the test passes, assign 99 to the variable. Make up the variable name. Remember to indent the second line two spaces.

```
In [ ]: 1 if my_variable < 99:
2         my_variable = 99
3
```

Task 11: Write an if statement that tests whether a first variable is greater than a second variable. (Take both values from the user) If the test passes, make the second variable equal to the first variable. Make up the variable names.

```
In [ ]: 1 first_var = int(input("Enter the value of the first variable: "))
2 second_var = int(input("Enter the value of the second variable: "))
3
4 if first_var > second_var:
5     second_var = first_var
6
```