

Task 1

```
In [3]: #Task 1: Rewrite this line so it's valid:  
#if species = "cat":  
species = "cat"  
if species == "cat":  
    print (species)
```

cat

Task 2

```
In [5]: #Task 2: Code the first line of an if statement that tests whether x has the same value as y  
x =1  
y =1  
  
if x == y:  
    print ("Same Value")  
else:  
    print("Different Value")
```

Same Value

Task3

```
In [ ]: #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.
a=1
b =1

if a == b:
    c = d
```

Task4

```
In [ ]: #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.

if total == 100:
    tax = 2
```

Task 5

```
In [ ]: #Task 5: If first_name is "Sherlock", then last_name is equal to "Holmes" and pal is equal to "Watson".
#Code all three lines.
if first_name == "Sherlock":
    last_name = "Holmes"
    pal = "Watson"
```

Task 6

In [11]: *#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 time”.*

```
data = input("Enter yes or no: ")

if data.lower() == "yes":
    print("Congrats")
elif data.lower() == "no":
    print("Better luck next time")
else:
    print("Invalid input")
```

Enter yes or no: No
Better luck next time

Task 7

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

```
if total < 100:
```

Task 8

In [12]: *#Task 8: Write a program:*
#1. Ask user to enter a value in range of 1 -> 1000.
#2. if the value is greater than 500, then write “greater than 500” else write “smaller than 500”.

```
valueRange = int(input("Enter value between 1 to 1000"))
if valueRange > 500:
    print("greater than 500")
else:
    print("smaller than 500")
```

Enter value between 1 to 1000122
smaller than 500

Task 9

In [18]: *#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.*

```
a = int(input("Enter value of a : "))
b = int(input("Enter value of b : "))
c = -7
if a-b >= c:
    print("Greater or Equal: True")
else:
    print("Greater or Equal: False ")
```

Enter value of a : 4
Enter value of b : 10
Greater or Equal: True

Task 10

In [19]: *#Task 10: Write an if statement that tests whether a variable is smaller than 99. If the test passes, assign to the variable. Make up the variable name. Remember to indent the second line two spaces.*

```
var = int(input("Enter value of Variable : "))

if var < 99:
    var = 99
print(var)
```

Enter value of Variable : 12
99

Task 11

In [22]: *#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.

```
var1 = int(input("Enter value of Variable1 : "))
var2 = int(input("Enter value of Variable2 : "))

if var1 > var2:
    var2 = var1
print(f"Var1 is {var1}")
print(f"Var2 is {var2}")
```

```
Enter value of Variable1 : 15
Enter value of Variable2 : 12
Var1 is 15
Var2 is 15
```

In []: