

Python 3 Worksheet: Selection

Student Resource



Python Worksheet 3 - Selection.docx



Python Worksheet 3 - Selection.pdf
pdf

Relational Operators

Operator	Meaning	Example
<	Less than	12 < 20
<=	Less than or equal to	20 <= 20
>	Greater than	100 > 50
>=	Greater than or equal to	100 >= 100
==	Equal to	100 == 100
!=	Not equal to	200 != 100

Example

```
number1 = 20
number2 = 40
print(number1 > number2) # prints False
print(number1 < number2) # prints True
print(number1 == number2) # prints False
print(number1 != number2) # prints True
```

Activity 1: Predict

```
colour = input("Enter a colour ")
if colour == "red":
    print("I like", colour, "too!")
    print("The world's biggest flower is", colour)
print("Have a nice day")
```

Read the code above and predict the output if the user enters:

a) red

b) Blue

c) RED

Don't run this code yet. Just read it and try to work out the output for each example.

Activity 2: Modify

Use these programs to help you write the program below.

Example 1:

```
age = int(input("How old are you? "))
if age < 12:
    print("The price is £5")
    print("Please sit downstairs")
else:
    print("The price is £8")
    print("You can sit where you like")
```

Example 2:

```
colour = input("Enter a colour ")
if colour == "red":
    print("I like", colour, "too!")
    print("The world's biggest flower is", colour)
print("Have a nice day")
```

Your task:

Now write a program that asks the user a quiz question about your favourite hobby

Part 1 - Output a message to indicate if they got it right or wrong

Part 2 - Create a variable to hold a score and add one point to it if they got the answer correct

Part 3 - Output the score using one line of code

Activity 3: Modify

Type in this code and run it a few times to find out what it does.

```

number = int(input("Enter an integer between 1 and 20 "))
if number < 1:
    print("Read the question!")
    answer = "Too small"
elif number < 10:
    answer = "Rate 1"
elif number < 15:
    answer = "Rate 2"
elif number <= 20:
    answer = "Rate 3"
else:
    print("Read the question!")
    answer = "Too big"
print("The result is:", answer)

```

Task 1: Complete this test table to show the output for the given inputs.

number	Output
5	
10	
0	
20	
21	

Task 2: Write a Program

Use the code from Task 1 as a model to write a program that helps you decide what to do on Saturday. Start by asking the user how much money they have to spend and make some recommendations based on that amount.

Paste your answer below: