Python Practical Manual Answers

CED 122

Practical 1

1. Insert the missing part of the code below to output "Hello World".

```python code
print("Hello World")
```

2. Complete the code block, print "YES" if 5 is larger than 2. Hint: remember the indentation.

```python code
if 5 > 2:
    print("YES")
```

3. Comments in Python are written with a special character, which one?

```python code
# This is a comment
```

4. Use a multiline string to make a multiline comment:

```python code
"""
This is a comment
written in
more than just one line
"""
```

5. Create a variable named `carname` and assign the value `Volvo` to it.

```python code
carname = "Volvo"
```

6. Create a variable named `x` and assign the value `50` to it.

```python code
x = 50
```

7. Display the sum of `5 + 10`, using two variables: `x` and `y`.

```python code
x = 5
y = 10
print(x + y)
```

8. Create a variable called `z`, assign `x + y` to it, and display the result.

```python code
z = x + y
print(z)
```

9. Insert the correct syntax to assign values to multiple variables in one line:

```python code
x, y, z = "Orange", "Banana", "Cherry"
```

10. Insert the correct syntax to assign the same value to all three variables in one code line.

```python code
x = y = z = "Orange"
```

11. Insert the correct keyword to make the variable `x` belong to the global scope.

```python code
def myfunc():
  global x
  x = "fantastic"
```

Practical 2

Section 1

First Column

Code:

```python code
x = 5
print(type(x))
```

Data type: `int`

Second Column

Code:

```python code
x = "Hello World"
print(type(x))
```

Data type: `str`

Third Column

Code:

```python code
x = 20.5
print(type(x))
```

Data type: `float`

Fourth Column

Code:

```python code
x = ["apple", "banana", "cherry"]
print(type(x))
```

Data type: `list`

Fifth Column

Code:

```python code
x = ("apple", "banana", "cherry")
print(type(x))
```

Data type: `tuple`

Sixth Column

Code:

```python code
x = True
print(type(x))
```

Data type: `bool`

Seventh Column

Code:

```python code
x = {"name" : "John", "age" : 36}
print(type(x))
```

Data type: `dict`

Section 2

First Task

Convert the value of txt to lower case.

Given:

```python code
txt = "Hello World"
```

Solution:

```python code
txt = txt.lower()
```

Second Task

Get the characters from index 2 to index 4 (exclusive).

Given:

```python code
txt = "Hello World"
```

Solution:

```python code
x = txt[2:5]
```

Third Task

The statement below would print a Boolean value, which one?

Given:

```python code
print(bool(0))
```

Solution:

```python code
print(False)
```

Fourth Task

Divide 10 by 2, and print the result.

Given:

```python code
print(10 / 2)
```

Solution:

```python code
print(5.0)
```

Putting everything together:

Section 1

1.
   - `int`
2.
   - `str`
3.
   - `float`
4.
   - `list`
5.
   - `tuple`
6.
   - `bool`

7.

- `dict`

Section 2

1.

```python code
txt = "Hello World"
txt = txt.lower()
```

2.

```python code
txt = "Hello World"
x = txt[2:5]
```

3.

```python code
print(False)
```

4.

```python code
print(5.0)
```

Practical 3

1. Print the number of items in the list:

```python code
fruits = ["apple", "banana", "cherry"]

print(len(fruits))
```

2. Print the third, fourth, and fifth items in the tuple:

```python code
fruits = ("apple", "banana", "cherry", "orange", "kiwi", "melon", "mango")

print(fruits[2:5])
```

3. Use the `discard` method to remove "banana" from the fruits set:

```python code
fruits = {"apple", "banana", "cherry"}

fruits.discard("banana")
```

4. Use the `clear` method to empty the car dictionary:

```python code
car = {
  "brand": "Ford",
  "model": "Mustang",
  "year": 1964
}
car.clear()
```

Practical 4

Problem 1

```python code
a = 2
b = 50
c = 2

if a == c or b == c:
  print("YES")
```

Problem 2

```
i = 1
while i < 6:
  print(i)
```

```
    i += 1

print ("i is no longer less than 6")

# Problem 3
fruits = ["apple", "banana", "cherry"]
for x in fruits:
    if x == "banana":
        break
    print(x)
```