Python - Tutorial 2 with Solution

For Loop

Q1

```python
for i in range(5):
    print("Yes")
print("No")
```

Q1 Answer

```
Yes
Yes
Yes
Yes
Yes
No
```

Q2

```python
value = 5
for i in range(value):
    print("Yes")
print("No")
```

Q2 Answer

```
Yes
Yes
Yes
Yes
Yes
No
```

Q3

```python
value = 5
for i in range(value):
    print("Yes", i, value)
print(value)
```

Q3 Answer

```
Yes 0 5
Yes 1 5
Yes 2 5
Yes 3 5
Yes 4 5
5
```

Q4

```python
value = "Monday"
for i in value:
    print(i)
print(value)
```

Q4 Answer

```
M
o
n
d
a
y
Monday
```

Q5

```python
value = "Monday"
for i in value + "Tuesday":
    print(i)
print(value)
```

Q5 Answer

```
M
o
n
d
a
y
T
u
e
s
d
a
y
Monday
```

Q6

```python
value = "Monday"
for i in value + "Tuesday":
    if i == "d"
        print(i)
```

Q6 Answer

```
d
d
```

Q7

```python
value = "Monday"
for i in value + "Tuesday":
    if i == "d"
        print(i)
    print(i)
```

Q7 Answer

```
M
o
n
d
d
a
y
T
u
e
s
d
d
a
y
```

Data Structure - String

Q8

```python
value = "rainbow"
print(value[0:5])
```

Q8 Answer

```
rainb
```

Q9

```python
value = "rainbow"
print(value[1:1])
```

Q9 Answer

```

```

Q10

```
value = "rainbow"
print(value[5:0])
```

Q10 Answer

```

```

Q11

```
value = "rainbow" + "rainbow"
print(value[7:])
```

Q11 Answer

```
rainbow
```

Q12

```
value = "rainbow"
print(value[-1])
```

Q12 Answer

```
w
```

Q13

```
value = "rainbow"
print(value[-5])
```

Q13 Answer

```
i
```

Q14

```
value = "rainbow"
print(value[0] + value[4] + value[6])
```

Q14 Answer

```
rbw
```

Data Structure - List

Q14

```
value = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]
print(value[2])
```

Q14 Answer

```
Wednesday
```

Q15

```python
value = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]
print(value[2:5])
```

Q15 Answer

```
[Wednesday, Thursday, Friday]
```

Q16

```python
value = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]
print(value[2+3-1])
```

Q16 Answer

```
Friday
```

Q17

```python
value = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]
print(value[0][0])
```

Q17 Answer

```
M
```

Q18

```python
value = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]
print(len(value) + 1)
```

Q18 Answer

```
6
```

Q19

```python
value = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]
print(len(value[0 + 1]))
```

Q19 Answer

```
7
```

Q20

```python
value = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]
print(value[0] + value[2])
```

Q20 Answer

```
MondayWednesday
```

Q21

```python
value = ["Monday", "Tuesday", "Wednesday", "Thursday", "Friday"]
print(value[1][0] + value[3][1] + value[1][1] + "rsday")
```

Q21 Answer

```
Thursday
```

Functions

Q22

```python
def print_days():
    print("Monday")
    print("Tuesday")

for i in range(3):
    print_days()
```

Q22 Answer

```
Monday
Tuesday
Monday
Tuesday
Monday
Tuesday
```

Q23

```python
def print_days():
    for i in range(3):
        print("Monday")
    print("Tuesday")

print_days()
```

Q23 Answer

```
Monday
Monday
```

```
Monday
Tuesday
```

Q24

```python
def print_days():
    for i in "Monday":
        print("Monday")

print_days()
```

Q24 Answer

```
Monday
Monday
Monday
Monday
Monday
Monday
```

Q25

```python
def grapes():
    print("grapes")

def banana():
    grapes()
    print("banana")

def apple():
    banana()
    print("apple")

apple()
```

Q25 Answer

```
grapes
banana
apple
```

Q26

```python
def grapes():
    return "grapes"

def banana():
    return "banana" + grapes()

def apple():
    return banana()
```

```
    print(apple())
```

Q26 Answer

```
bananagrapes
```

Q27

```
def grapes():
    return "grapes"

def banana():
    return "banana" + grapes()

def apple(value):
    if value == 'banana':
        return banana()
    else value == 'grapes':
        return grapes()

print(apple('grapes'))
```

Q27 Answer

```
grapes
```

Q28

```
def monday():
    return "m"

def tuesday():
    return "t"

def wednesday():
    return "w"

def all():
    return monday() + tuesday() + wednesday()

value = all() + "day"
print(value)
```

Q28 Answer

```
mtwday
```

Q29

```
def monday():
    return "m"
```

```python
def tuesday():
    return "t"

def wednesday():
    monday()
    tuesday()
    return "w"

def all():
    return monday() + tuesday() + wednesday()

value = all() + "day"
print(value)
```

Q29 Answer

```
mtwday
```

Q30

```python
def monday():
    value = 1
    return value

value = 5
monday()
print(value)
```

Q30 Answer

```
5
```