LOOPS
Approximately how many hours did you study programming, starting from the beginning of the last session?

A. 0-2 hours
B. 2-4 hours
C. 4-6 hours
D. 6-8 hours
E. 8-10 hours
F. 10-12 hours
G. 12-14 hours
H. Over 14 hours
Are you on track with this course?

A. Even ahead
B. Completely on track
C. Little behind but can manage
D. Far behind, need help
E. Don't know
Notes

• There is a high probability that the university will close for a certain period in the near future.
• In that case the course will be rearranged and continue as an e-learning course.
• The first test that is scheduled on next Thursday, March 19, will be moved to a later date or to the end of the semester.
Information about the first test

- Covers topics from Weeks 1 to 5.
- First part is a quiz consisting of questions similar to those in weekly quizzes.
- Second part is programming consisting of tasks similar to those in homeworks and practice sessions.
- In the first part materials not allowed, in the second part materials allowed.
- Programming tasks must be solved in Thonny.
What lines may cause an error (mark one or many)?

```python
n = int(input("Enter number: "))
if (n > 0):
    print("positive")
elif n < 0:
    print(negative)
```

- A. `n = int(input("Enter number: "))`
- B. `if (n > 0):`
- C. `print("positive")`
- D. `elif n < 0:
    print(negative)`
- E. `print(negative)`
What will be printed on the screen?

def fun(x, y):
    return x + 2 * y
print(fun(2, 3))

A. 8  
B. 10  
C. 12  
D. Something else  
E. Error message
Indefinite loops (while)

while condition:
    statement
    statement
    statement

a = 0
while a < 5:
    print('Loop')
    a += 1
How many times will "Hello" printed?

num = 5
while num >= 1:
    print("Hello")

A. 0
B. 1
C. 5
D. Some other number
E. Infinitely many

Correct answer: E. Infinitely many
```python
i = 0
sum = 0
while i < 5:
    sum = sum + i
    i = i + 1
print(i)
```

What will be printed?

A. 0
B. 4
C. 5
D. 6
E. Some other number

C. 5
Definite loops (for)

```python
for variable in list:
    statement
    statement

for a in [-3, 5, 12, 0, -7]:
    print(a)

for name in ['Iko', 'Püü', 'Kõu']:
    print('Hello,', name)
print('Done!')
```
How many numbers will be printed?

for i in [1, 2, 3, 4, 5]:
  if i > 3:
    print(i)

A. 1
B. 2
C. 3
D. 4
E. 5
F. Some other number
How many numbers will be printed?

for i in range(5):
    print(i)

A. 0
B. 1
C. 4
D. 5
E. 6
F. Some other number
The `break` statement

```python
def main(a):
    a = 100
    while a < 107:
        if a % 7 == 0:
            break
        a += 1
    print(a)
```

```python
while condition:
    statements
    break
    statements
```
The `continue` statements

```python
a = 0
while a < 100:
    a += 1
    if a % 3 == 0:
        continue
    if a % 5 == 0:
        continue
    print(a)
```
What is the last number printed?

A. 0
B. 9  ✔
C. 10
D. 20
E. Something else

```python
i = 0
while i < 10:
    if 3*i + 1 == 20:
        break
    print(i)
    i += 1
```
Infinite loops

while True:
    s = input("Enter 'done': ")
    if s == 'done':
        break
print("Thank you!")
Exercises