CONDITIONAL EXECUTION
Notes

• How to work with course materials
• Timetable
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
What will be printed?

```python
x = 4
y = 5
print(2*y - 1 + x)
```

A. 13
B. 13.0
C. Error message
D. Something else
What will be printed?

```
x = 4.0
y = 5
print(2*y - 1 + x)
```

A. 13
B. 13.0
C. Error message
D. Something else
One-way decisions

```python
if question:
    statement
    statement
    statement

if x > 0:
    print('Positive')
    print('Greater than 0')
```
Two-way decisions

if question:
    statement
else:
    statement

if x > 0:
    print('Positive')
else:
    print('Negative or zero')
Multi-way decisions

```python
if question :
    statement
elif question :
    statement
else :
    statement
```

```python
if x > 0:
    print('Positive')
elif x < 0:
    print('Negative')
else:
    print('Zero')
```
Comparison operators

<   less than
<=  less than or equal to
==  equal to
greater than or equal to
>   greater than
!=  not equal

Remember:  = is used for assignment
Logical operators

**and**

**or**

**not**

```python
if x > 0 and x < 10:
    print('x is greater than 0 and less than 10')

if n % 2 == 0 or n % 3 == 0:
    print('n is divisible by 2 or by 3')

if not (n % 2 == 0):
    print('n is odd')
```
What will be printed?

A. True
B. False
C. Error message
D. Something else
What will be printed?

A. True
B. False
C. Error message
D. Something else

True and True or False
What will be printed?

True or 'Hello'

A. True
B. False
C. 'Hello'
D. Error message
E. Something else
What will be printed?

A. True
B. False
C. 'Hello'
D. Error message
E. Something else

A. 20%
B. 20%
C. 20%
D. 20%
E. 20%
What will be printed?

```python
x = 0.6
y = 0.5
if x - y == 0.1:
    print("Yes")
else:
    print("No")
```

A. Yes  
B. No  
C. Error message  
D. Something else
Nested decisions

```python
if x == y:
    print('x and y are equal')
else:
    if x < y:
        print('x is less than y')
    else:
        print('x is greater than y')
```
Indentation

• **Increase indent** after an if statement (do not forget about : )
• **Maintain indent** to indicate the scope of the block (which lines are affected by the if)
• **Reduce indent** back to the level of the if statement to indicate the end of the block
• Usually 4 spaces

```
if x > 0:
    print('Positive')
    print('Greater than 0')
print('The end')
```
Try-except

try :
    statement
    statement
except :
    statement
    statement

try :
    number = int(text)
except :
    number = -1
Reserved words

if
    and
    or
    not
else
elif
try
except