

## Q1 Academic Honesty

0 Points

It is a violation of the Academic Integrity Code to look at any reference material other than your textbook and lecture notes, or to give inappropriate help to someone or to receive unauthorized aid by someone in person or electronically via messaging apps such as WhatsApp. Academic Integrity is expected of all students of Hacettepe University at all times, whether in the presence or absence of members of the faculty. Do NOT sign nor take this exam if you do not agree with the honor code.

Understanding this, I declare I shall not give, use or receive unauthorized aid in this examination.

Signature (Specify your name and surname as your signature)

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## Q2 Expressions

1 Point

Which of the following is a Boolean expression. Select all that apply. **To get credits from this question you have to select all of the correct answers.**

☒ False

☐ 'a' + 'c'

☒ 4 > 5

☒ 2 in [1, 2, 3]

☐ "False"

## Q3 Functions

1 Point

What can you say about the following function:

```
def addEm(x, y, z):  
    return x + y + z
```

- ☐ It takes three integers as input and returns their sum
- ☐ It takes three strings as input and returns their concatenation
- ☐ It takes three lists as input and returns another list that is obtained by linking all these three lists
- ☒ All of the above

## Q4 Functions

1 Point

Consider the following Python code.

```
1 a = 10  
2 b = 20  
3 result = 0  
4  
5 def double(x):  
6     result = x + x  
7     return result  
8  
9 b=double(a)  
10 a = 5  
11 print(double(a))
```

Considering the line numbers included in the figure, which of the following best reflects the order in which these lines of code are processed in Python?

- ☐ 1, 2, 3, 5, 6, 7, 9, 5, 6, 7, 10, 11, 5, 6, 7
- ☐ 1, 2, 3, 5, 9, 5, 6, 7, 10, 11, 5, 6, 7
- ☒ 1, 2, 3, 5, 9, 5, 6, 7, 9, 10, 11, 5, 6, 7, 11
- ☐ None of the above

## Q5 Functions

1 Point

What does the following Python code print?

```
1 x = 20
2
3 def f1(y):
4     x = 10
5     result = y+x * y-4
6     return result
7
8 y = 2
9 print(f1(y))
```

18

## Q6 Lists

1 Point

What does the following Python code print?

```
1 list1 = [2, 3, 5, 8, 13, 21, 34]
2 list2 = [0, 2, 1, 2, 5, 4]
3 list3 = []
4 for x in list2:
5     list3.append(list1[x])
6 print(list2)
```

[0, 2, 1, 2, 5, 4]

## Q7 Lists

1 Point

What does the following Python code print?

```
1 list1 = [2, 3, 5, 8, 13, 21, 34]
2 list2 = [12, 13, 25, 34, 43, 3]
3 list3 = [x+5 for x in list1[:5] if x in list2]
4 print(list3)
```

[8, 18]

## Q8 Functions

2 Points

Fill in the blank lines 1 to 3 and complete the Python code so that it could produce the given output.

Beware that you can use **only** the function calls **f1()**, **f2()**, or **f3()** to fill the blanks. It must be **one function call for a line**. Also make sure that you have **no** spaces in your answer. For instance, “ f2() ”, “f2()”, and “f2 ()” all will be considered wrong (Double quotes are used to emphasize spaces here, do not use quotes in your answer, either.).

**To get credits from this question you have to provide all of the correct answers.**

Python Code	Output
<pre>def f3():     print("BBM101")  def f2():     _____(1)_____      print("Python")      f3()  def f1():     _____(2)_____      print("BBM103")      _____(3)_____  f1()</pre>	<pre>BBM101 Python BBM101 BBM103 BBM101 Python BBM101</pre>

Blank #1

f3()

Blank #2

f2()

Blank #3

f2()

## Q9 Loops

## 2 Points

Fill in the blank lines 1 to 4 and complete the Python code so that it could produce the given output.

Provide your answers for blank lines from 1 to 4, separated with ";".

Python Code	Output
<pre> for i in range(5):     if ____ (1) ____:         ____ (2) ____     print("Loop index is " + str(i))     for j in range(i):         if ____ (3) ____:             ____ (4) ____         print(i + j) </pre>	<pre> Loop index is 1 1 Loop index is 3 3 4 5 </pre>

- ☐ `i % 2 == 0; break; i == j; break;`
- ☒ `i % 2 == 1; continue; i == j; break;`
- ☐ `i % 2 == 0; continue; i == j; break;`
- ☐ `i % 2 == 1; break; i == j; break;`

## Q10 Match keywords

1 Point

You are given a list of items, enumerated from (a) to (f).

- (a) Unicode
- (b) Assembly
- (c) Antikythera Mechanism
- (d) Cooking recipe
- (e) Registers
- (f) Turing machine

Please match the items with keywords given below by entering the letter into text boxes. Items are used only once. For instance, "Unicode" matches with "Emoji". Thus, "a" is entered to indicate the match.

**Q10.1**

0 Points

What item matches with **Emoji**?

a

**Q10.2**

0.2 Points

What item matches with **Stored program computer**?

e

**Q10.3**

0.2 Points

What item matches with **CPU**?**Q10.4**

0.2 Points

What item matches with **Fixed program computer**?**Q10.5**

0.2 Points

What item matches with **Imperative knowledge**?**Q10.6**

0.2 Points

What item matches with **Low level language**?

b

Short Exam 3

GRADED

STUDENT

MEHMET TAHA USTA

TOTAL POINTS

8.2 / 11 pts

QUESTION 1

Academic Honesty

0 / 0 pts

QUESTION 2

Expressions

1 / 1 pt

QUESTION 3

Functions

1 / 1 pt

QUESTION 4

Functions

1 / 1 pt

QUESTION 5

Functions

1 / 1 pt

QUESTION 6

Lists

1 / 1 pt

QUESTION 7

Lists

1 / 1 pt

QUESTION 8

Functions

2 / 2 pts

QUESTION 9

Loops

0 / 2 pts

QUESTION 10

Match keywords

0.2 / 1 pt

10.1 (no title)

0 / 0 pts

10.2 (no title)

0 / 0.2 pts

10.3 (no title)

0 / 0.2 pts

10.4 (no title)

0 / 0.2 pts

10.5 (no title)

0 / 0.2 pts

10.6 (no title)

0.2 / 0.2 pts