

ENGR 101
INTRODUCTION TO PROGRAMMING
STUDY QUESTIONS (WEEK 2)

Q1. Start the Python interpreter in interactive mode and use it as a calculator to solve the following problem.

Ahmet had 10 Turkish Liras (TL). He bought 5 pens and 2 notebooks. Each pen costs 25 kuruş, and each notebook costs 1.25 TL. Then, he spent all his remaining money to buy simits. Each simit costs 75 kuruş. How many simits was Ahmet able to buy? How much money he has left? (Hint: 1 TL = 100 kuruş)

Q2. Assume that we execute the following assignment statements:

```
x=5
y=6.0
z="."
```

For each of the following expressions, write the value of the expression and the type (of the value of the expression).

- $x*5=.....$
- $x/2$
- $x/2.0$
- $z*4$
- $z+y$
- $x*y$
- $x+y$
- $z*y$
- $y*z$

Q3. Figure out the errors in the below lines and try to fix them.

- `print type(Hello word)`
- `print a+5`
- `print "Hello" + 5`
- `print "+-----+" + Hi`
- `print "Şehir University"`
- `print 'Turkiye'de'`

Q4. For each of the following expressions, write the value of the expression.

- $10+20*30/10$
- $(10+20)*30/10$
- $10+(20*30)/10$

- $(10+20*30)/10$
- $10+20*(30/10)$

Q5. Use given numbers and try to find b with mathematical operations.(You can use any number as integer or float. You don't have to use all numbers. You can't use a number more than once. Hint: parenthesis will help a lot.)

- given numbers: 5,6,2,7,4 → $b = 33$
- given numbers: 3,4,5,9 → $b = 170$
- given numbers: 9,8,7,6,5,2 → $b = 81$

Q6. What will program print out ?

- `print 5 + 7`
- `print 5 + "7"`
- `print 5+7.0`
- `print "5"+"7"`

Q7. What will program print out ?

- `print 5**2`
- `print 5*2`
- `print 5*2.0`
- `print "5"*2`

Q8. Try to write three different Python codes which have the following errors, respectively.

a-) syntax error **b-)** runtime error **c-)** semantic error

Q9. For the following expressions, which assignments/assignment give error?

- `a = 12`
- `a = "15"`
- `"a"=8`
- `12 = "a"`
- `a = b`
- `a = "b"`