## controls

June 26, 2021

```
[1]: if True:
                         ")
         print("If
    Ιf
[2]: if True:
         print("Hello")
         print("Salem")
         print("Holo")
     print("Welcome")
    Hello
    Salem
    Holo
    Welcome
[3]: if False:
         print("Hello")
         print("Salem")
         print("Holo")
     print("Welcome")
    Welcome
[4]: a = True
     if a:
                         ")
         print("If
    Ιf
[5]: b = False
     if b:
                         ")
         print("If
[6]: if 3 > 2:
         print("If
                         ")
    Ιf
```

```
[7]: a = 3 > 2
      if a:
                          ")
          print("If
     Ιf
 [8]: if 3:
          print("If
                          ")
     Ιf
 [9]: if bool(3):
          print("If
                          ")
     Ιf
[10]: if 0:
          print("If
                          ")
[11]: if 'salem':
                          ")
          print("If
     Ιf
[12]: a = [11,2,3]
      if a:
                              ")
          print("if
     if
[13]: grade = 85
      if grade >= 95:
          print("A")
      elif 90 <= grade < 95:</pre>
          print("A-")
      elif 85 <= grade < 90:
          print("B+")
      elif 80 <= grade < 85:</pre>
          print("B")
      else:
                              ")
          print("
     В+
[15]: i = 0
      while i < 10:
          print("Hello")
          i += 1
```

```
Hello
     Hello
     Hello
     Hello
     Hello
     Hello
     Hello
     Hello
     Hello
     Hello
[16]: i = 0
      while i < 10:
          print("Salem")
          i += 1
      else:
                                  ")
          print("while-else
      print("Kelesi operatorlar")
     Salem
     while-else
     Kelesi operatorlar
            }while( )
     do{}
     while True:
                   if : break
[17]: """
      ***
      ***
      ***
      n n n
[17]: '\n***\n***\n'
[18]: i = 1
      while i <= 3:
          print("*", end = " ")
          i += 1
```

```
[19]: i = 1
      while i <= 3:
          j = 1
          while j <= 3:
             print("*", end = " ")
             j += 1
          print()
          i += 1
[23]: i = 1
      while i <= 3:
          j = 1
          while j <= 3:
             print("*", end = " ")
             j += 1
          print()
          i += 1
[24]: a = 7
      i = 1
      while i <= a:
          j = 1
          while j <= a:</pre>
             print("*", end = " ")
             j += 1
          print()
          i += 1
```

```
[25]: a = input(" : ")
     print(type(a))
     <class 'str'>
[26]: a = input(" : ")
     a = int(a)
     i = 1
     while i <= a:
         j = 1
         while j <= a:
            print("*", end = " ")
             j += 1
        print()
         i += 1
[27]: a = int(input(" : "))
     i = 1
     while i <= a:
         j = 1
         while j <= a:</pre>
            print("*", end = " ")
            j += 1
         print()
         i += 1
```

```
[28]: for i in [1,2,3,4,5]:
          print(i)
     1
     2
     3
     4
     5
[29]: for i in "SPAM":
          print(i.lower(), end = ' ')
     spam
[30]: sum = 0
      for i in (3,4,5):
          sum += i
      print(f"sum = {sum}")
     sum = 12
[31]: sum = 0
      a = (3,4,5)
      for i in a:
          sum += i
      print(f"sum = {sum}")
     sum = 12
[34]: print("sum = {0}".format(sum), "ffdff", "dsdss")
     sum = 12 ffdff dsdss
[35]: range(5)
[35]: range(0, 5)
[36]: list(range(0,5))
[36]: [0, 1, 2, 3, 4]
[37]: sum = 0
      for i in range(10):
```

```
sum += i
      print(f"sum = {sum}")
     sum = 45
[38]: sum = 0
      for i in range(5, 10):
          sum += i
      print(f"sum = {sum}")
     sum = 35
[39]: list(range(3, 20, 3))
[39]: [3, 6, 9, 12, 15, 18]
[40]: for _ in range(5):
          print("salem")
     salem
     salem
     salem
     salem
     salem
[42]: i = 1
      sum = 0
      while i < 10:
          sum += i
          print(f"{i} --> {sum}")
          i += 1
     1 --> 1
     2 --> 3
     3 --> 6
     4 --> 10
     5 --> 15
     6 --> 21
     7 --> 28
     8 --> 36
     9 --> 45
[44]: sum = 0
      for i in range(1,10):
          sum += i
          print(f"{i} --> {sum}")
```

```
1 --> 1
     2 --> 3
     3 --> 6
     4 --> 10
     5 --> 15
     6 --> 21
     7 --> 28
     8 --> 36
     9 --> 45
[45]: sum = 0
      for i in range(10):
          sum += i
      else:
          print("for
                                 ")
      print(f"sum = {sum}")
     for
     sum = 45
[46]: sum = 0
      for i in range(10):
          sum += i
          if i == 5:
              break
      else:
          print("for
                                 ")
      print(f"sum = {sum}")
     sum = 15
[47]: sum = 0
      for i in range(1,10):
          sum += i
          if i == 5:
              continue
          print(f"{i} --> {sum}")
      else:
          print("for
                              ")
     1 --> 1
     2 --> 3
     3 --> 6
     4 --> 10
     6 --> 21
     7 --> 28
     8 --> 36
     9 --> 45
```

```
for
[48]: 34/0
      ZeroDivisionError
                                                 Traceback (most recent call last)
      <ipython-input-48-db36f5ada519> in <module>
      ----> 1 34/0
      ZeroDivisionError: division by zero
[49]: try:
         34/2
      except ZeroDivisionError:
                                 ")
          print("0-
[50]: try:
         34/0
      except ZeroDivisionError:
         print("0-
                                 ")
     0-
[51]: try:
         34/0
      except ZeroDivisionError as var1:
         print("0-
                                ")
          print(var1)
     0-
     division by zero
[52]: try:
         34/0
      except ZeroDivisionError as var1:
         print("0-
         print(var1)
      finally:
          print("
                                  ")
     0-
     division by zero
[53]: try:
      except ZeroDivisionError as var1:
```

```
print("0- ")
print(var1)
finally:
    print(" ")
```

```
[58]: try:
    a = 34/2
    b = int("fg")
    print("Try ")
    except ZeroDivisionError as var1:
        print("0- ")
        print(var1)
    except ValueError:
        print(" ")
```

```
except KeyError:
    print("fdfd")
finally:
    print(" ")
```

```
[59]: sum = 0
     print("
                      : ")
     while True:
        try:
            a = int(input())
            if a == 0:
               break
            sum += a
        except ValueError:
            print("Eu, koke,
                             !")
            continue
    Eu, koke, !
[60]: sum = 0
     print("
                 : ")
     while True:
        try:
            a = input()
            if a == 'n':
               break
            else:
               a = int(a)
            print("
                                       n")
        except ValueError:
            print("Eu, koke, !")
            continue
        sum += a
     print(f'sum = {sum}')
                          n
                          n
                          n
    sum = 40
```

```
[62]: sum = 0
      flRunning = True
      while flRunning:
          print("
                                          n")
          try:
              a = input()
              if a == 'n':
                  flRunning = False
              else:
                  a = int(a)
                  sum += a
          except ValueError:
                                    !")
              print("Eu, koke,
              continue
      print(f'sum = {sum}')
                              n
                              n
                              n
                              n
     Eu, koke,
                              n
     Eu, koke,
                              n
                              n
     sum = 51
     1
[63]: def title():
          print("
                  !")
                               ")
          print(" title
[66]: title()
        !
       title
[67]: print("
                       ")
      print("
                                ")
      title()
      print("
                                         ")
```

```
title
[77]: f = 0
      def sum():
          f = 5
          s = 0
          s = 12
         print(f" s = {s}")
         s = s + 3
         return s
      s = 90
      d = sum()
      print(f"d = {d}")
      print(f's = \{s\}')
      print(f'f = \{f\}')
         s = 12
     d = 15
     s = 90
     f = 0
[78]: f = 0
      def sum():
         global f
         f = 5
         s = 0
          s = 12
        print(f" s = {s}")
          s = s + 3
         return s
      s = 90
      d = sum()
      print(f''d = \{d\}'')
      print(f's = \{s\}')
      print(f'f = \{f\}')
         s = 12
     d = 15
     s = 90
     f = 5
[79]: def square(n):
         n = n**2
          return n
```

```
[80]: square(3)
[80]: 9
[81]: def title(n):
         n = n**2
          return None
[84]: print(title(5))
     None
[87]: def square(n:int)->int:
         n = n*2
          return n
[88]: square(5)
[88]: 10
[89]: square('d')
[89]: 'dd'
[90]: lambda x : x*2
[90]: <function __main__.<lambda>(x)>
[91]: f = lambda x : x*2
[92]: f(4)
[92]: 8
 []:
```