Introduction to Tuples

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A tuple is a structured type that allows you to store different type values t_1, t_2, …, t_n on a single value of type $(t_1, t_2, …, t_n)$

- The number of fields is fixed.

- The fields are of heterogeneous type.

Introduction to Tuples

```
(3, 'z', False) :: (Int, Char, Bool)
(6, 9)          :: (Int, Int)
(True, (6, 9))  :: (Bool, (Int, Int))
```

```
mostFrequentCharacter :: String -> (Char, Int)
mostFrequentCharacter "AVATAR"  ☞ ('A', 3)
```

```
timeDecomposition :: Int -> (Int, Int, Int)    -- hours, minutes, seconds

timeDecomposition seconds = (h, m, s)
    where
        h = div seconds 3600
        m = div (mod seconds 3600) 60
        s = mod seconds 60
```