```
Started on Thursday, 6 October 2022, 10:50 AM
State Finished
Completed on Thursday, 6 October 2022, 11:00 AM
Time taken 10 mins 1 sec
Grade 10.00 out of 10.00 (100%)
```

Question **1**Correct

Mark 3.00 out of 3.00

Fill in the gaps to make the code below type check (compile without type errors):

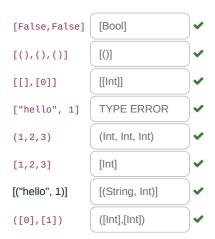
Your answer is correct.

The correct answer is: Fill in the gaps to make the code below type check (compile without type errors):

```
n :: Int
n = 42
i :: Bool
i = False
x :: Double
x = 3.14
y :: Double
y = 1.61
example1 = x + [fromIntegral] (n * [floor] y - [(\z -> if not z then 1 else 0)] i)
```

```
Question 2
Correct
Mark 4.00 out of 4.00
```

Match the following expressions with their corresponding types.



Your answer is correct.

The correct answer is: [False, False] \rightarrow [Bool], [(),(),()] \rightarrow [()], [[],[0]] \rightarrow [[Int]], ["hello", 1] \rightarrow TYPE ERROR, (1,2,3) \rightarrow (Int, Int), [1,2,3] \rightarrow [Int], [("hello", 1)] \rightarrow [(String, Int)], ([0],[1]) \rightarrow ([Int],[Int])

Question 3

Correct

Mark 3.00 out of 3.00

Consider the following declaration:

```
data Vector = Vector Double Double
```

Which of the following is a valid program (will compile without a type or syntax error)?

Select one:

```
a. len Vector x y z = sqrt (x^2 + y^2 + z^2)
b. len Vector (x y z) = sqrt (x^2 + y^2 + z^2)
c. len = sqrt (x^2 + y^2 + z^2)
d. len (x, y, z) = sqrt (x^2 + y^2 + z^2)
e. len v = sqrt (v.x^2 + v.y^2 + v.z^2)
f. len (x y z) = sqrt (x^2 + y^2 + z^2)
g. len (Vector x, y, z) = sqrt (x^2 + y^2 + z^2)
h. len (Vector x y z) = sqrt (x^2 + y^2 + z^2)
i. len (Vector (x, y, z)) = sqrt (x^2 + y^2 + z^2)
j. len x y z = sqrt (x^2 + y^2 + z^2)
k. len v = sqrt (x^2 + y^2 + z^2)
l. len Vector (x, y, z) = sqrt (x^2 + y^2 + z^2)
```

Your answer is correct.

The correct answer is: len (Vector x y z) = sqrt ($x^2 + y^2 + z^2$)