1. Assume the following data.frame is assigned to the variable df. Evaluate each of the following R expressions.

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice</td>
<td>30</td>
<td>TRUE</td>
</tr>
<tr>
<td>Bob</td>
<td>28</td>
<td>TRUE</td>
</tr>
<tr>
<td>Eve</td>
<td>35</td>
<td>FALSE</td>
</tr>
</tbody>
</table>

   df[3, 2]  
   df[df$Age > 30,]
   df$Student
   df[c(3, 1, 2),]$Age

2. Assume that a <- c(1, 2, 3) and b <- c(4, 5, 6). Evaluate each of the following R expressions.

   b[a] 
   2:4 + b
   (2 * a) == b

3. Assume that `a` and `b` are numeric vectors of the same length. Translate the R function definition below into the equivalent Python code, assuming `a` and `b` are now lists of floats. Use only built-in Python, no NumPy or pandas.

   mystery <- function(a, b) {
       (a + b) / 2
   }

   [Solutions on back of page]
Solutions to practice questions:

1. (a) 35
   (b) Eve 35 FALSE
   (c) TRUE TRUE FALSE
   (d) 35 30 28

2. (a) 4 5 6
   (b) 6 8 10
   (c) FALSE FALSE TRUE

3. Equivalent Python code:

```python
def mystery(a, b):
    c = []
    for i in range(len(a)):
        c.append((a[i]+b[i])/2)
    return c
```