More Higher-Order Mercury Procedures

1.) Write a procedure named `partition`, which acts like `filter`, except that it also returns a list of the elements on which the predicate failed. Be sure to write appropriate `pred` and `mode` annotations. An example query is shown below:

```
?- partition([9, 2, 6, 5],
             (pred(Num::in) is semidet :- Num > 5),
             GreaterThan,
             EverythingElse).
GreaterThan = [9, 6],
EverythingElse = [2, 5].
```

2.) Consider the following `pred` and `mode` annotations for an unseen (but implemented) procedure named `checkSomething`:

```
:- pred checkSomething(int).
:- mode checkSomething(in) is semidet.
```

Consider the following list: `[1, 2, 3, 4, 5]`. Write a call to `partition` that uses `checkSomething` to split this list into two partitions.