Homework Assignment 8

Any automatically graded answer may be manually graded by the instructor. Submissions are expected to only use functions taught in the course. If a submission uses a disallowed function, that exercise can get zero points. Excluding promises, *all functions that mutate values are disallowed* (mutable functions usually have a `!` in their name).

The interpreter

1. Implement the following **effectful** functions:
   (a) `(env-put e x v)`: given a heap `m` return as a new state `(environment-put m e x v)` and as a result `(d:void)`.
   (b) `(env-push e x v)`: given a heap `m` return `(environment-push m e x v)`
   (c) `(env-get e x)`: given a heap `m` return the same state and as a result `(environment-get m e x)`.

   Feel free to use the solution of Homework 6 as the basis of your implementation.

2. Rewrite `eval-exp` and `eval-term` to be monadic. **Neither function can manipulate the memory directly.** Your solution **must** use the `do`-notation when composing multiple effectful operations instead of `eff-bind`.