Project 2
COMP301 Spring 2023

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Part A.
(1)

-Syntax and data types
-Values
-Environment
-Behavior specification
-Behavior implementation

(2)

-Syntax: lang.rkt,
-Datatypes: data-structures.rkt
-Values: data-structures.rkt
-Environment:
    -Definition: data-structures.rkt
    -Related Procedures: environments.rkt
-Behavior specification: interp.rkt, constructors and observer (value-of)
-Behavior implementation: interp.rkt by value-of

Part B.
(1)
```
>  (define init-env
      (lambda ()
       (extend-env
        'x (num-val 1)
        (extend-env
         'y (num-val 2)
         (extend-env
          'z (num-val 3)
          (empty-env))))))
```
(2)
```
>  (define init-env
      (lambda ()
       (extend-env
        'x (num-val 1)
        (extend-env
         'y (num-val 2)
         (extend-env
          'z (num-val 3)
          [])))))
```

```
>  (define init-env
      (lambda ()
       (extend-env
        'x (num-val 1)
        (extend-env
         'y (num-val 2)
         [z=3]))))
```

```
>  (define init-env
      (lambda ()
       (extend-env
        'x (num-val 1)
        [y=2]
        [z=3])))
```

```
>  (define init-env
      (lambda ()
       [x=1]
       [y=2]
       [z=3]))
```

Part C.
- Expressed: number, boolean, string , list, pair
- Denoted: number, boolean, string , list, pair

Part D.
(1)*list_exp*: Yakup

(2)*cons_exp*: Yakup

(3)*sum_exp*: Yakup

(4)*rational_exp*: Ayda

(5)*op_exp*: Ayda

(6)*simpl_exp*: Ayda

Bonus.