



## Append:

[Append.txt](#)

## Store and Environment:

```
// From the information of the store, when we pass L3: (7|(8|(9|(10|nil)))) into Reverse,
// it is doing:
// 1. {Append {Reverse [8,9,10]} [7]} -----> {Append [10,9,8] [7]} -----> [10,9,8,7] (final result)
// 2. {Reverse [8,9,10]} ----> {Append {Reverse [9,10]} [8]} -----> {Append [10,9] [8]}
// 3. {Reverse [9,10]} ----> {Append {Reverse [10]} [9]} -----> {Append [10] [9]} -----> [10,9]
// 4. {Reverse [10]} ----> {Append {Reverse []} [10]} -----> [10]
```

## Append\_diff:

 `append_diff.txt`     `append_diff(Store  
and Environment).tx`

```
// From the information of the store, when we pass [4,3,2,1] into Reverse
// {Reverse [4,3,2,1]} ----> {ReverseD [4,3,2,1] Out []} ----> Return [1,2,3,4]
// {ReverseD [4,3,2,1] Out []} -----> {ReverseD [3,2,1] Out [4]}
// {ReverseD [3,2,1] Out [4]} -----> {ReverseD [2,1] Out [3,4]}
// {ReverseD [2,1] Out [3,4]} -----> {ReverseD [1] Out [2,3,4]}
// {ReverseD [1] Out [2,3,4]} -----> {ReverseD [] Out [1,2,3,4]}
// {ReverseD [] Out [1,2,3,4]} -----> for the [] case, ReverseD bound [1,2,3,4] to Out, Out = [1,2,3,4]
// Return [1,2,3,4]
```

**Reverse with size of 6:**