

Practical 6  
Artificial Intelligence

EL3

19BCE248

AIM: Write a PROLOG program on lists.

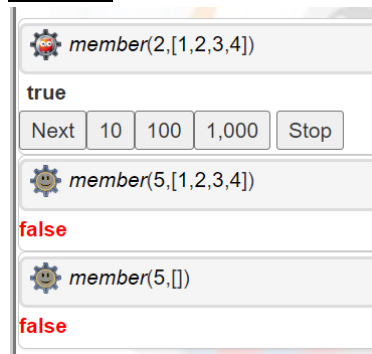
- i. To find whether given element is a member of list
- ii. ii Inserting an element at a) beginning b) end c) desired position

PROLOG CODE:

**Member of a list**

```
member(X,[X|_]).  
member(X,[_|T]):-member(X,T).
```

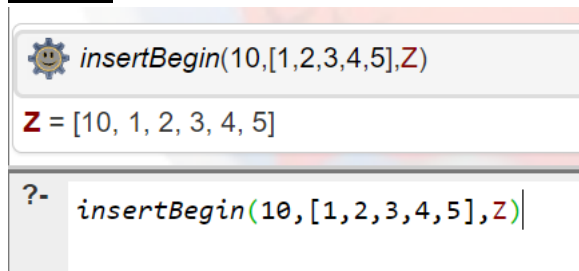
**Output:**



**Inserting at beginning:**

```
insertBegin(X,[H|T],[X|[H|T]]).
```

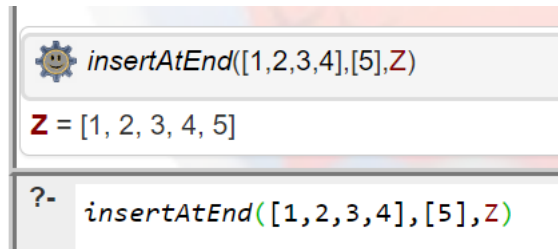
**Output:**



### Insert at end:

`insertAtEnd([], L,L).`

`insertAtEnd([H | T],L2,[H | L3]):-insertAtEnd(T,L2,L3).`



### Insert at Desired Position:

`insertAtPos(Item,List,1,[Item | List]).`

`insertAtPos(Item,[H | List],Pos,[H | Result]):-Pos1 is Pos-1,insertAtPos(Item,List,Pos1,Result).`

