Practical 7:

2CS702 – Artificial Intelligence

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Aim:

Write a PROLOG program on lists i. Reversing a list.

ii. Finding the position of given element in the list a) from beginning. b) from end.

Code

```prolog
reverse([],Z,Z).

reverse([H|T],Z,Acc) :- reverse(T,Z,[H|Acc]).


indexOf([Element|_], Element, 0).

indexOf([_|Tail], Element, Index):- indexOf(Tail, Element, Index1),
Index is Index1+1.


indexOfend(List, Element, Index):- reverse(List, List2, []),
indexOf(List2, Element, Index).
```

Output:

```
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1 ?- [prac7].
true.

2 ?- reverse([a,b,c],X).
X = [c, b, a].

3 ?- indexOf([a,b,c],b,X).
X = 1 .

4 ?- indexOfend([a,b,c,d],b,X).
X = 2
```