

## BRAINWARE UNIVERSITY

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Subject : Artificial Intelligence Lab

Subject code:BCA691

Assignment : week 5

Prolog problems:-

**1.)Write a prolog(swi) program to insert\_nth( item,n,into\_list,result) that asserts that is the listinto\_list with item inserted as the n\_th element into every list at all levels .**

**Code)**

**mem(X,[X|\_]).**

**mem(X,\_[T]):- mem(X,T).**

**/\* insert a number in the list. \*/**

```
insert(L,[X|Y],[L|_]).
```

```
insert(L,P,[X|Y],[X|M]):-
```

```
P>1,
```

```
P1 is P-1,
```

```
insert(L,P1,Y,M).
```

```
insert(L,1,[X|Y],M):- append([L],[X|Y],M).
```

OUTPUT:

```
?- ['insertinlist.pl'].
```

```
true.
```

```
?- insert(10,2,[1,2,3,4],M).
```

```
M = [1, 10, 2, 3, 4]
```