

Roll no	1562
Title	Prolog
Objective	A)Welcome to prolog B)Create a calculator showing facts and rules C)Create a food table showing facts and rules

Prog1.pl:

main :- write('Welcome to Prolog').

```
.
Welcome to prolog

yes
| ?- change_directory('C:/1562_AIML').
```

```
| ?- ['Prog1'].
compiling C:/1562_AIML/Prog1.pl for byte code...
C:/1562_AIML/Prog1.pl compiled, 1 lines read - 267 bytes written, 3 ms
```

Cal.pl:

add(A,B):-

```
    C is A/B,
    write('Addition='),
    write(C),nl.
```

sub(A,B):-

```
    C is A/B,
    write('Subtraction='),
    write(C),nl.
```

mul(A,B):-

```
    C is A/B,
    write('Multiplication='),
    write(C),nl.
```

div(A,B):-

```
    C is A/B,
    write('Division='),
    write(C),nl.
```

```
| ?- ['cal.pl'].
compiling C:/1562_AIML/cal.pl for byte code...
C:/1562_AIML/cal.pl compiled, 3 lines read - 541 bytes written, 3 ms

yes
| ?- add(12,4).
Addition=16

yes
| ?- ['cal.pl'].
compiling C:/1562_AIML/cal.pl for byte code...
C:/1562_AIML/cal.pl compiled, 3 lines read - 547 bytes written, 3 ms

yes
| ?- sub(12,4).
Subtraction=8

yes
| ?- ['cal.pl'].
compiling C:/1562_AIML/cal.pl for byte code...
C:/1562_AIML/cal.pl compiled, 3 lines read - 553 bytes written, 3 ms

yes
| ?- mul(12,4).
Multiplication=48

yes
| ?- ['cal.pl'].
compiling C:/1562_AIML/cal.pl for byte code...
C:/1562_AIML/cal.pl compiled, 3 lines read - 543 bytes written, 3 ms

yes
| ?- div(12,4).
Division=3.0

yes
| ?-
```

food.pl:

/*facts*/

food(burger).
food(sandwich).
food(pizza).
lunch(sandwich).
dinner(pizza).

/*rules*/

meal(X) :- food(X).

```
| ?- ['food.pl'].
compiling C:/1562_AIML/food.pl for byte code...
C:/1562_AIML/food.pl compiled, 10 lines read - 705 bytes written, 3 ms

yes
| ?- food(pizza).

yes
| ?- meal(X).

X = burger ?

yes
| ?- meal(X),lunch(X).

X = sandwich ?

yes
| ?- meal(X),dinner(X).

X = pizza

yes
| ?- |
```