

Artificial Intelligence

Assignment 10

Meet Mehta

20BCP126

Div2 G4

Code: (For box solver problem using Prolog)

```
getbox(1). getbox(2). getbox(3). getbox(4). getbox(5).
```

```
box(1, black, 3).
```

```
box(2, black, 1).
```

```
box(3, white,1).
```

```
box(4, black, 2).
```

```
box(5, white, 3).
```

owners(A, B, C, D, E) :-

```
getbox(A), getbox(B), getbox(C), getbox(D), getbox(E),
```

```
    A\=B,A\=C,A\=D,A\=E,
```

```
    B\=C,B\=D,B\=E,
```

```
    C\=D,C\=E,
```

```
    D\=E,
```

```
    box(A,ColorA,_),box(B,ColorA,_),
```

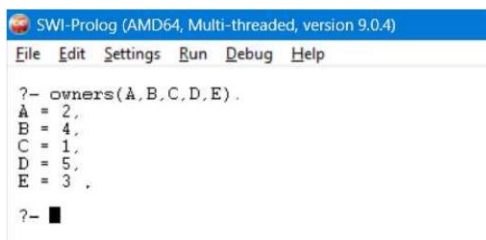
```
    box(D,ColorD,_),box(E,ColorD,_),
```

```
    box(C,_,SizeC), box(D,_,SizeC),
```

```
    box(E,_,SizeE),box(B,_,SizeB),
```

```
    SizeE<SizeB.
```

Output:



```
SWI-Prolog (AMD64, Multi-threaded, version 9.0.4)
File Edit Settings Run Debug Help
?- owners(A,B,C,D,E).
A = 2,
B = 4,
C = 1,
D = 5,
E = 3,
?-
```