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**Class: TY-IT A B3**

**Facts:**

```
male(jethalal).
male(bhide).
male(sodhi).
male(hathi).
male(bapuji).
female(daya).
female(madhuri).
female(roshan).
female(komal).

parent(tappu,jethalal).
parent(tappu,daya).
parent(sonu,bhide).
parent(sonu,madhvi).
parent(gogi,sodhi).
parent(gogi,roshan).
parent(goli,hathi).
parent(goli,komal).
parent(jethalal,bapuji).
occupation(jethala,businessman).
occupation(bhide,teacher).
occupation(sodhi,mechanic).
occupation(hathi,doctor).
occupation(bapuji,retired).
occupation(iyer,scientist).
occupation(tarak,writer).
occupation(daya,housewife).
occupation(madhvi,housewife).
occupation(roshan,housewife).
occupation(komal,housewife).
occupation(babita,housewife).
occupation(anjali,housewife).
best_friends(jethalal,taarak).
```

**Rules:**

```
child(X,Y):- parent(Y,X).
best_friend(X, Y) :- best_friends(X, Y).
mother(X, Y):- parent(X, Y), female(Y).
```

```
father(X, Y):- parent(X, Y), male(Y).
spouse(X, Y):- parent(Z, X), parent(Z, Y).
grandparent(X, Y):- parent(X, Z), parent(Z, Y).
```

### **Query Information:**

```
% c:/Users/choud/OneDrive/Desktop/everything/5th
Sem/AI/custom_kb.pl compiled 0.00 sec, 38 clauses
```

```
?- mother(tappu,X).
```

```
X = daya.
```

```
?- parent(tappu,X).
```

```
X = jethalal ;
```

```
X = daya.
```

```
?- spouse(sodhi,X).
```

```
X = sodhi ;
```

```
X = roshan.
```

```
?- grandparent(tappu,X).
```

```
X = bapuji ;
```

```
false.
```

```
?- spouse(sodhi,Y).
```

```
Y = sodhi ;
```

```
Y = roshan.
```

```
?- best_friend(jethalal,X).
```

```
X = taarak.
```

```
?- spouse(sodhi,roshan).
```

```
true.
```

```
?- child(hathi,X).
```

```
X = goli.
```

```
?- child(babitaaji,X).
```

```
false.
```

```
?- grandparent(tappu,X).
```

```
X = bapuji .
```

```
?- spouse(bhide,madhvi).
```

```
true.
```

```
?- occupation(jethala,businessman).
```

true.