

Program:

color:-

```
write('enter color\n'),
read(Response),
nl,
(Response == green ->color(green);
Response == yellow ->color(yellow);
Response == red ->color(red);
write('invalid input \n'),fail).
color(green):-size.
color(yellow):-shape.
color(red):-size.
```

size:-

```
write('enter size \n'),
read(Response),
nl,
(Response == big ->size(big);
Response == medium ->size(medium);
Response == small ->size(small);
write('invalid input \n'),fail).
size(big):-watermelon.
size(medium):-apple.
size(small):-grapes.
watermelon:-write('your decision is to watermelon').
apple:-write('your decision is to apple').
grapes:-write('your decision is to grapes').
```

shape:-

```
write('enter shape \n'),
read(Response),
nl,
```

```
(Response == round ->shape(round);
Response == thin ->shape(thin);
write('invalid input \n'),fail).
shape(round):-size1.
shape(thin):-banana.
%size1:-write('your decision is to size').
banana:-write('your decision is to banana').
size1:-
write('enter size \n'),
read(Response),
nl,
(Response == big ->size1(big);
Response == small ->size1(small);
write('invalid input \n'),fail).
size1(big):-coconut.
size1(small):-lemon.
coconut:-write('your decision is to coconut').
lemon:-write('your decision is to lemon').
size2:-
write('enter size \n'),
read(Response),
nl,
(Response == medium ->size2(medium);
Response == small ->size2(small);
write('invalid input \n'),fail).
size2(medium):-apple.
size2(small):-taste.
apple:-write('your decision is to apple').
%taste:-write('your decision is to taste').
taste:-
write('enter taste \n'),
```

```
read(Response),  
nl,  
(Response == sweet ->taste(sweet);  
Response == sour ->taste(sour);  
write('invalid input \n'),fail).  
taste(sweet):-cherry.  
taste(sour):-grapes.  
cherry:-write('your decision is to cherry').  
grapes:-write('your decision is to grapes').
```

Output:

ERROR: Stream user_input:80:4 Syntax error: Unexpected end of clause

```
?- color.  
enter color  
|: yellow.
```

```
enter shape  
|: round.
```

```
enter size  
|: small.
```

```
your decision is to lemon  
true.
```

```
?- color.  
enter color  
|: green.
```

```
enter size  
|: big.
```

```
your decision is to watermelon  
true.
```

```
?- color.  
enter color  
|: red.
```

```
enter size  
|: medium.
```

```
your decision is to apple  
true.
```

```
?- color.  
enter color  
|: yellow.  
  
enter shape  
|: round.  
  
enter size  
|: big.  
  
your decision is to coconut  
true.
```