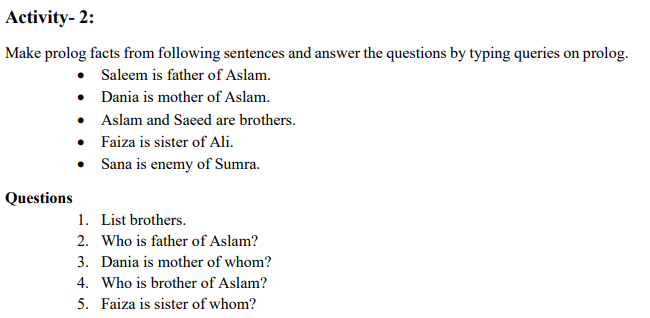
**LAB NO. 08**

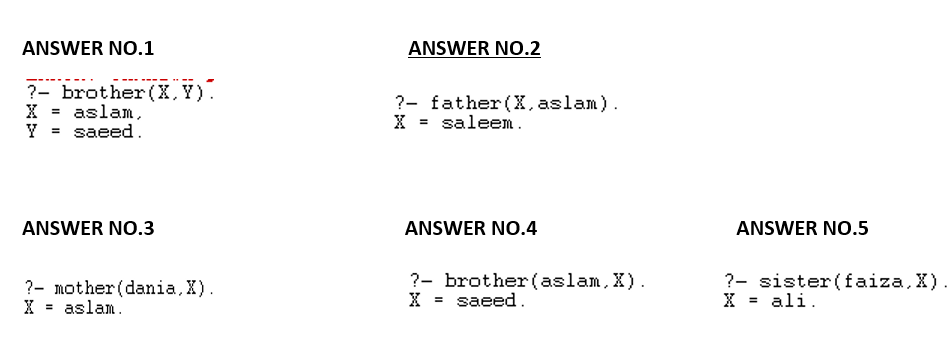
**INTRODUCTION TO PROLOG**

**ACTIVITY-1:**

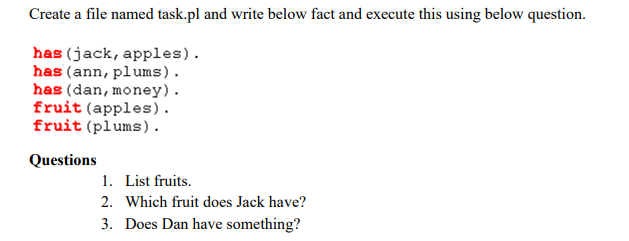
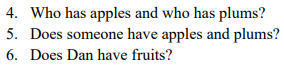
|  |  |  |
| --- | --- | --- |
| DECLARATIVE | PROLOG FACT | RELATIONSHIP OR PROPERTY |
| SSUET is university | **university(ssuet)** | **university** |
| Faheem likes icecream | **likes(faheem,icecream).** | **likes** |
| Birds can fly | **fly(birds).** | **fly** |
| Switch is off | **off(switch).** | **off** |
| Sara is enemy of Saima | **enemy(sara,saima).** | **enemy** |

**ACTIVITY-2:**





**ACTIVITY-3:**

**ANSWER NO.1**



**ANSWER NO.2**



**ANSWER NO.3**



**ANSWER NO.4**



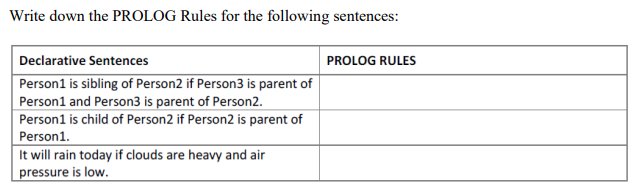
**ANSWER NO.5**



**ANSWER NO.6**



**ACTIVITY-4:**



**rain(today):-heavy(clouds),low(air\_pressure).**

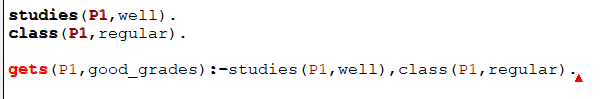
**child(P1,P2):-parent(P2,P1).**

**Sibling(P1,P2):-parent(P3,P1),parent(P3,P2).**

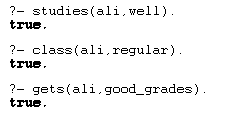
**ACTIVITY-5:**



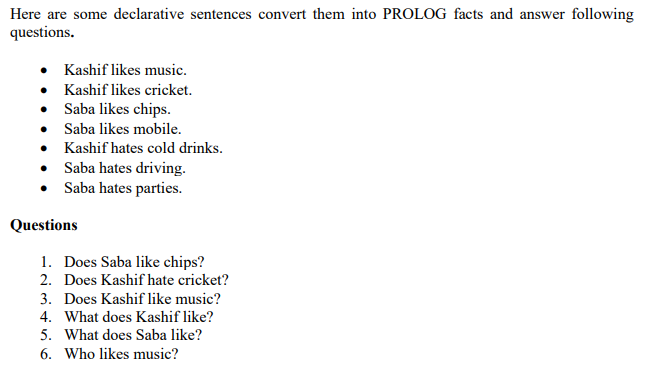
**PROGRAM IN PROLOG:**



**OUTPUT:**



**ACTIVITY-6:**



**ANSWERNO.1:**



**ANSWER NO.2**



**ANSWER NO.3**



**ANSWER NO.4**



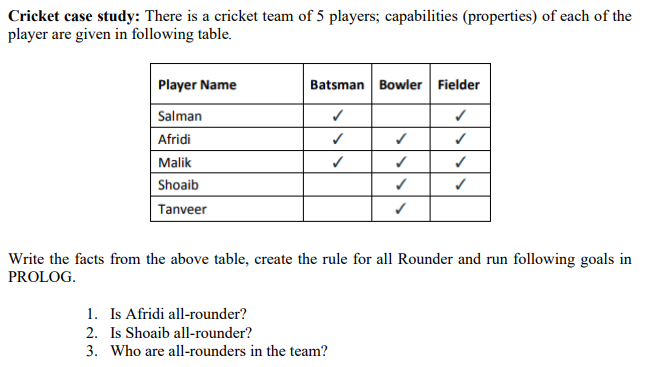
**ANSWER NO.5**

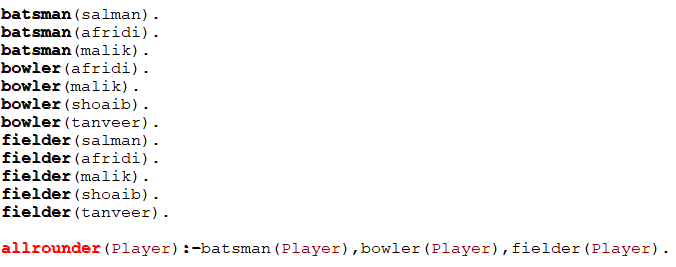


**ANSWER NO.6**



**ACTIVITY NO.7:**



**FACTS & RULE:** 

**ANSWER NO.1**



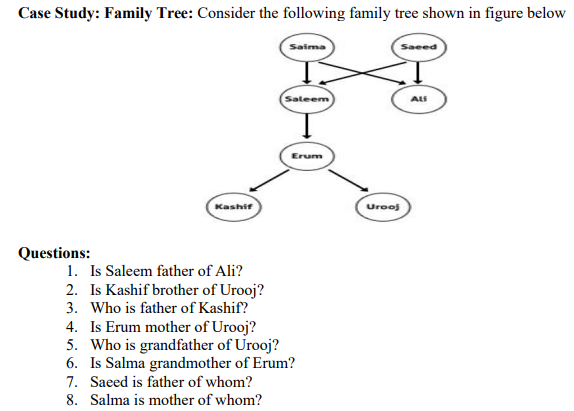
**ANSWER NO.2**



**ANSWER NO.3**



**ACTIVITY NO.8:**



**PREDICATES & CLAUSES:**

A screenshot of a computer program

Description automatically generated with medium confidence

**ANSWER NO.1:**



**ANSWER NO.2:**



**ANSWER NO.3: ANSWER NO.4:**



A picture containing text, font, white, logo

Description automatically generated

**ANSWER NO.5: ANSWER NO.6:**

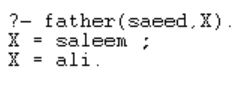
A black text on a white background

Description automatically generated with medium confidenceA picture containing text, font, white

Description automatically generated

**ANSWER NO.7: ANSWER NO.8:**

A picture containing text, font, white, typography

Description automatically generated

**ACTIVITY NO.10:**

A picture containing text, screenshot, document

Description automatically generated



**ANSWER NO.1:**

A black text on a white background

Description automatically generated with medium confidence

**ANSWER NO.2:**

A picture containing text, font, white, typography

Description automatically generated

**ANSWER NO.3:**

A black text on a white background

Description automatically generated with medium confidence

**ANSWER NO.4:**

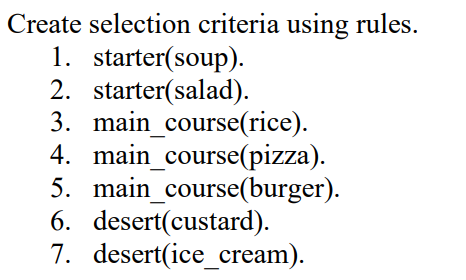
A picture containing text, font, black and white, document

Description automatically generated

**ANSWER NO.5:**

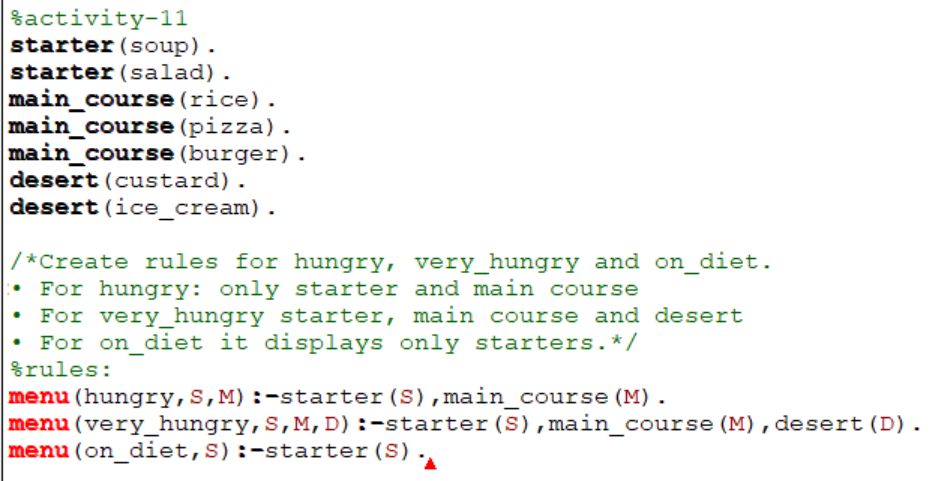


**ACTIVITY NO.11:**

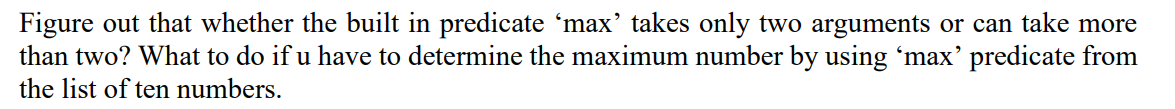


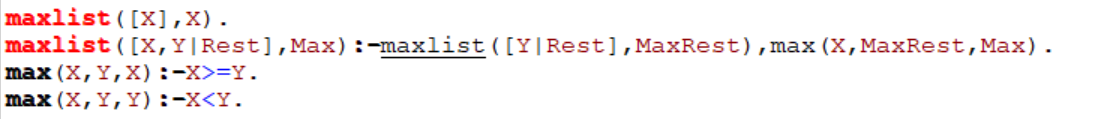
A white background with black text

Description automatically generated with low confidence

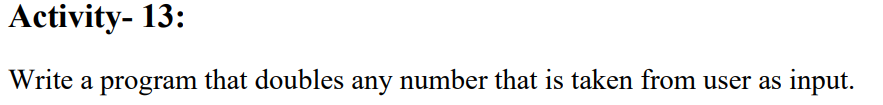


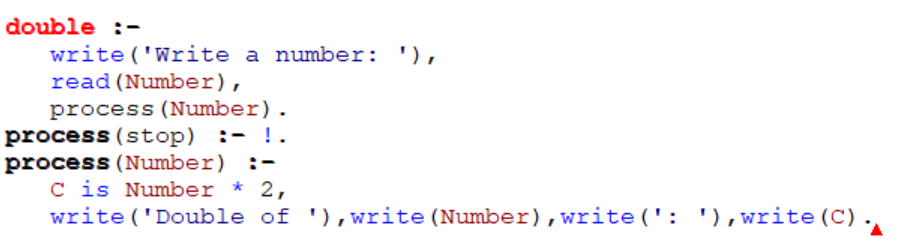
**ACTIVITY NO.12:**

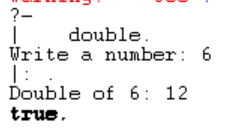


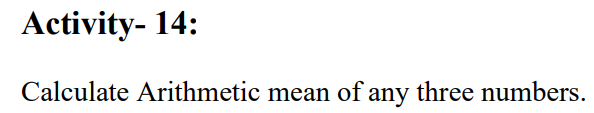
In Prolog, the built-in predicate **max/2** takes only two arguments and is used to determine the maximum of two values. If you need to determine the maximum number from a list of ten numbers, you can use the **max\_list/2** predicate along with the **max/2** predicate. 



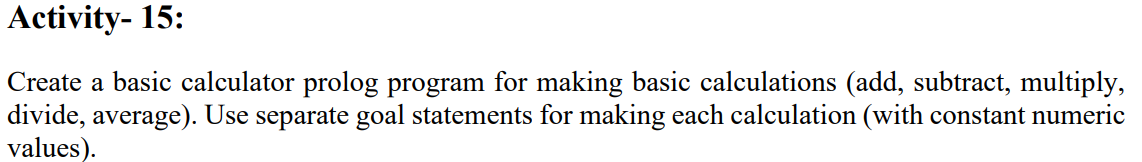


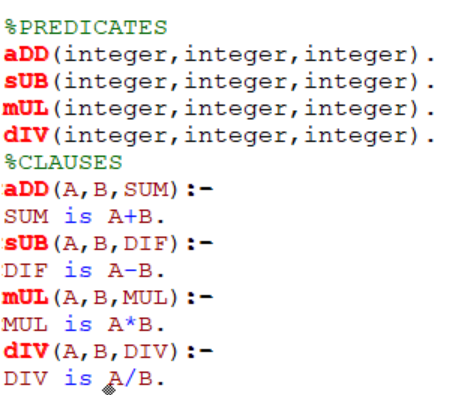




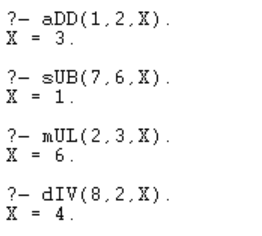


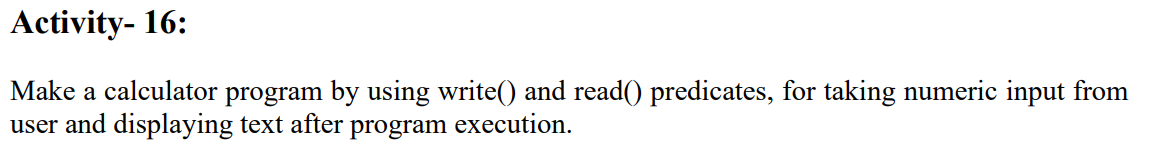






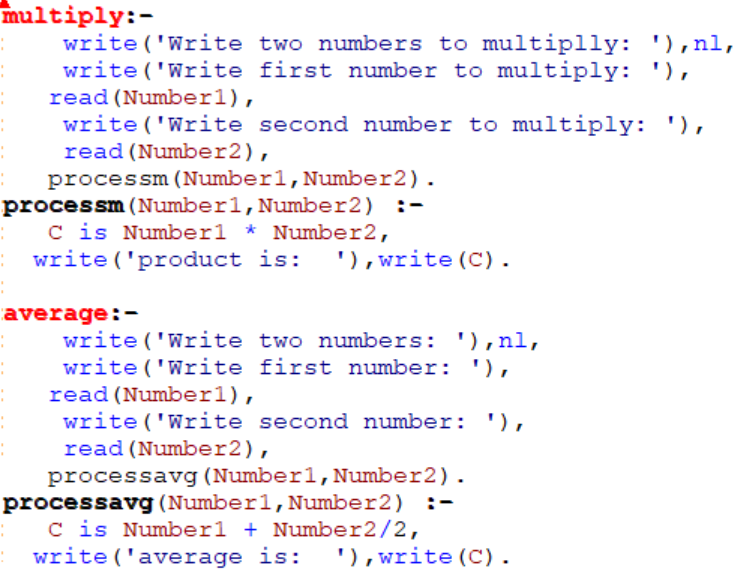
**OUTPUT:**





**CLAUSES:**

A screenshot of a computer code

Description automatically generated with low confidence

**OUTPUT:**

