Course: Artificial Intelligence Lab
Assignment List: Week-1

1. Write a PROLOG program to find anwsers to the following queries based on the given facts.

```
father_of(X,Y):-?
mother_of(X,Y):- ?
grandfather_of(X,Y):- ?
grandmother_of(X,Y):- ?
sister_of(X,Y):- ?
brother_of(X,Y):- ?
aunt_of(X,Y):- ?
uncle_of(X,Y):- ?
ancestor_of(X,Y):- ?
/*facts*/
male(jack).
male(oliver).
male(ali).
male(james).
male(simon).
male(harry).
female(helen).
female(sophie).
female(jess).
female(lily).
parent_of(jack,jess).
parent_of(jack,lily).
parent_of(helen, jess).
parent_of(helen, lily).
parent_of(oliver,james).
parent_of(sophie, james).
parent_of(jess, simon).
parent_of(ali, simon).
parent_of(lily, harry).
parent_of(james, harry).
```

2. Write a PROLOG program to calculate the sum of two given numbers.

3. Write a PROLOG program to calculate the product of three given numbers.

4. Write a PROLOG program to check whether a given number is odd or even.

5. Write a PROLOG program to find the maximum of two given numbers.

6. Write a PROLOG program to find the minimum of three given numbers.

7. Write a PROLOG program to find maximum difference among three given numbers.

8. Write a PROLOG program to find closest two integers among three given integers.