Lab-5

Name: Dishant Modh

Roll No.: IT076

Aim:- WAP to study Using arithmetic operators in Prolog.

• Accept name of the student, rollno, his subject name, maximum marks and obtained marks in the subject. (Take marks of at least 6 subjects). Compute the percentage of a student. Display his result with other information. Use variables, arithmetic operators, I/O predicates appropriately.

1. Code:-

```
domains
predicates
        go
clauses
        go:-
        write("Enter name of student:-"),readln(N),nl,
        write("Enter roll number of student:-"),readint(RN),nl,
        write("Enter subject information for 6 subjects:-"),nl,
        write("Subject1 name:-"),readln(S1),nl,
        write("Max marks for subject1:-"),readint(MM1),nl,
        write("Obtain marks:-"),readint(M1),nl,
        write("Subject2 name:-"),readln(S2),nl,
        write("Max marks for subject2:-"),readint(MM2),nl,
        write("Obtain marks:-"),readint(M2),nl,
        write("Subject3 name:-"),readln(S3),nl,
        write("Max marks for subject3:-"),readint(MM3),nl,
        write("Obtain marks:-"),readint(M3),nl,
        write("Subject4 name:-"),readln(S4),nl,
        write("Max marks for subject4:-"),readint(MM4),nl,
```

```
        write("Obtain marks:-"),readint(M4),nl,
        write("Subject5 name:-"),readln(S5),nl,
        write("Max marks for subject5:-"),readint(MM5),nl,
        write("Obtain marks:-"),readint(M5),nl,
        write("Subject6 name:-"),readln(S6),nl,
        write("Max marks for subject6:-"),readint(MM6),nl,
        write("Obtain marks:-"),readint(M6),nl,
        OOM = M1 + M2 + M3 + M4 + M5 + M6,
        MMM=MM1+MM2+MM3+MM4+MM5+MM6,
        PRR=OOM/MMM*100,
        write("**********RESULT**********"),nl,
        write("Student name:-"),write(N),nl,
        write("Roll no - "),write(RN),nl,
        write("Subject Name- "),write(S1),write("  "),write(S2),write("  "),write(S3),write("
"),write(S4),write(" "),write(S5),write(" "),write(S6),write(" "),nl,
        write("Total marks-"),write(MMM),nl,
        write("Total obtain marks -"),write(OOM),nl,
        write("%Percentage : "),write(PRR).
```

2. Output:-

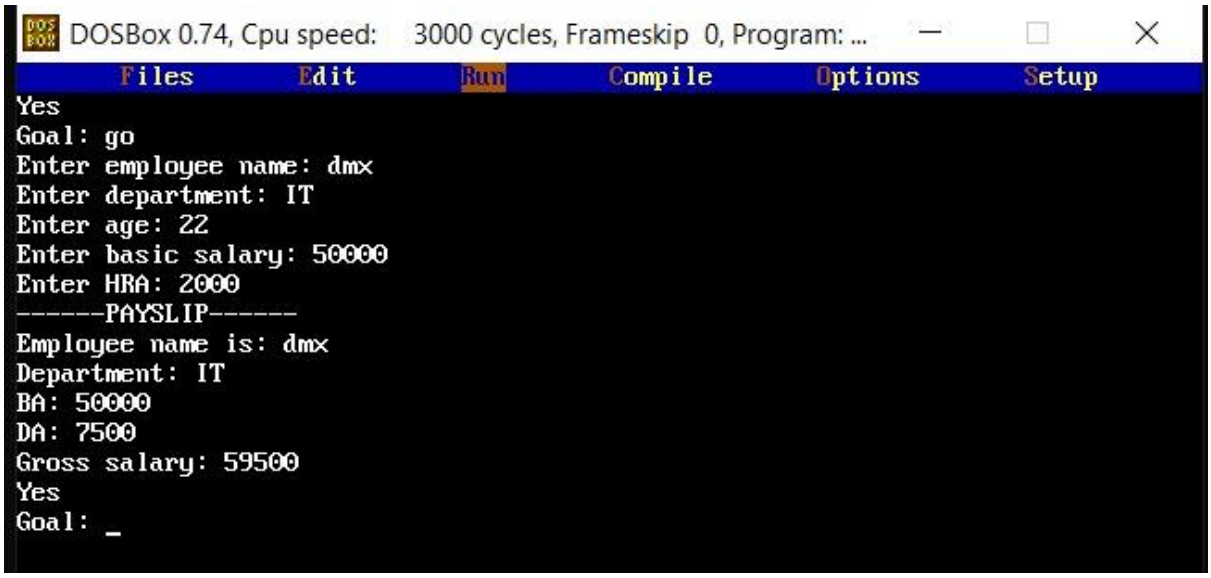

DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: ...
Files Edit Run Compile Options Setup
Dialog
Yes
Goal: go
Enter name of student:-DIvyesh
Enter roll number of student:-21
Enter subject information for 6 subjects:-
Subject1 name:-DAA
Max marks for subject1:-36
Obtain marks:-27
Subject2 name:-DSA
Max marks for subject2:-36
Obtain marks:-29
Subject3 name:-_
Subject3 name:-KS
Max marks for subject3:-36
Obtain marks:-29
Subject4 name:-DAIE
Max marks for subject4:-36
Obtain marks:-31
Subject5 name:-ECES
Max marks for subject5:-36
Obtain marks:-31
Subject6 name:-_
Subject6 name:-AMP
Max marks for subject6:-36
Obtain marks:-28
**********RESULT**********
Student name:-DIvyesh
Roll no - 21
Subject Name- DAA DSA KS DAIE ECES AMP
Total marks-216
Total obtain marks -175
%Percentage : 81.018518519Yes
Goal:

• Accept department, designation, name, age, basic salary, house rent allowance (HRA) of an employee. Compute dearness allowance (DA) which is 15% of basic salary. Determine the gross salary(BA+HRA+DA) of the employee. Display all information of the employee

1. Code

```
predicates
        go
        da(real,real)
        gross(real,real,real)
clauses
        go:-
        write("Enter employee name: "), readln(N),
        write("Enter department: "), readln(D),
        write("Enter age: "), readint(A),
        write("Enter basic salary: "), readreal(S),
        write("Enter HRA: "), readreal(H),
        write("------PAYSLIP------"), nl,
        write("Employee name is: "), write(N), nl,
        write("Department: "), write(D), nl,
        write("BA: "), write(S), nl,
        write("DA: "), da(S,DA), write(DA), nl,
        write("Gross salary: "), gross(S,H,G), write(G), nl.
        da(S,DA):-
        DA=0.15*S.
        gross(S,H,G):-
        da(S,DA),
        G=S+H+DA.
```

2. Output


DOSBox 0.74, Cpu speed: 3000 cycles, Frameskip 0, Program: ...
Files Edit Run Compile Options Setup
Yes
Goal: go
Enter employee name: dmx
Enter department: IT
Enter age: 22
Enter basic salary: 50000
Enter HRA: 2000
------PAYSLIP------
Employee name is: dmx
Department: IT
BA: 50000
DA: 7500
Gross salary: 59500
Yes
Goal: _