

```

1 for each action  $\mathcal{A}$  in the Plan Instance File do
2   Interpreter;
3   converts  $\mathcal{A}$  into a set  $\mathcal{S}$  of Canonical Robot Language commands;
4   stores  $\mathcal{S}$  in Canonical Robot Language Plan;
5 end
6 for each set  $\mathcal{S}$  in Canonical Robot Language Plan do
7   Robot Controller reads  $\mathcal{S}$ ;
8   System Monitor calls Predicate Evaluation;
9   Predicate Evaluation;
10  traces back action  $\mathcal{A}$  from set  $\mathcal{S}$ ;
11  computes truth-value of predicates for action  $\mathcal{A}$  precondition;
12  if output of Predicate Evaluation is true then
13    Robot Controller executes  $\mathcal{S}$ ;
14    Predicate Evaluation computes truth-value of predicates for
    action  $\mathcal{A}$  effect;
15    if output of Predicate Evaluation is true then
16      end;
17    end
18    else failure;
19  end
20  else failure;
21 end

```