

CSE 310 Online B1: Ternary?

Time: 30 minutes

June 2025

1 Objective

In this task, you will extend your offline to handle mainly two things.

- Ternary operations
- A custom loop structure described below.

2 Requirements

- Extend your parser code to handle ternary operations (check example) and the custom loop structure

```
times (5) {  
    statement_list;  
}
```

Here, the statements will be repeated 5 times.

- We need semantic checking. Throw an error if the iteration count is float.

You may need to add symbol(s) in the lexer for this assignment.

Sample Input

```
int var(int a, int b){  
    return a+b;  
}  
  
int main(){
```

```
int a,b,x;
float d;
d=var(1,2*3)+3.5*2;

x = (a > b) ? a : b;

times (5) {
    x = x + 1;
}

return 0;
}
```

Expected Log Output

The log file will contain the new rules with content matched by that rule, similar to your assignment.

Sample Input

```
int var(int a, int b){
    return a+b;
}

int main(){

    int a,b,x;
    float d;
    d=var(1,2*3)+3.5*2;

    times (4.5) {
        x = x + 1;
    }

    return 0;
}
```

Expected Error Output

Line No. 15: Negative iteation count

3 Marks Distribution

- Parsing without error - 4 + 4
- Detecting errors - 2

4 Submission Instructions

- Zip and submit your parser and lexer files