Exercise 1 (Intermediate Code) Given is the following statement:

\[ x := -(a+b)*(c+d)+(a+b+c)/(a+b) \]

- Draw the syntax tree and the DAG (directed acyclic graph) for this statement.
- Generate 3-address code for the statement based on the DAG.

Exercise 2 (Basic Blocks) Given is the following program part:

```c
main()
{
    int i;
    int a[100], b[100], c[100];
    ...
    i = 0;
    do {
        c[i] = a[i] - b[i];
        if (c[i] < 0)
            c[i] = 0;
        i++;
    } while (i < 100);
    ...
}
```

- Generate 3-address code for the program part.
- Group the 3-address code into basic blocks and draw the (degenerated) control flow graph.