if you define more than the MAX number of variables, then you error:

```
CS370/Lab4> lab4
        int y1;
        name inserted
        NAME
                        OFFSET
                        0
        y1
int y2;
        name inserted
        NAME
                        OFFSET
        y1
                        0
        y2
                        1
int y3;
Error: Max number of variables reached:2
```

you cannot declare a variable more than once:

```
CS370/Lab4> lab4
int y1;

name inserted

NAME OFFSET
y1 0
int y1;
Error: Unkown variable found
```

you cannot use a variable that is not defined:

```
CS370/Lab4> lab4
int y1;

name inserted

NAME OFFSET
y1 0

y2 = 3
found an integer
Error: Unkown variable found
```

a declared variable can be set and used:

```
CS370/Lab4> lab4
int y1;
       name inserted
        NAME
                       OFFSET
        y1
int y2;
       name inserted
       NAME
                       OFFSET
       у1
                       1
       y2
y1 = 7
found an integer
y2 = (y1 + 3)
found a variable value = y1
found an integer
y2
found a variable value = y2
the anwser is 10
```