

## Project – Part 3 (Semantic Analyzer)

### Execution example:

```
int main(){

    int y = 5;
    while(y<10){
        y = y+1;
    }
    printf("Value is %d", y);

    void growing(){

        float g = 107.5;
        float o = 88.5;
        float sum;

        for(int i = 0; i<10; i = i + 1){
            g = g + o;
            o = o - g;
            sum = o + g;
        }

        printf("Sum is %d", sum);
    }

    int function(int number){
        int down = 10;
        int up = 100;
        if(number<155){
            number = number * up;
        }
        else{
            number = number / down;
        }
        return number;
    }

    float func(int kk){
        float gf = 109.5;
        do{
            gf = gf + 20.5;
            kk = kk + 30;
        }while(gf<500.5)
```

```
return kk;
}

float p = 10;
int f = 105.5;

j = 207.5;

char c = '$';
char c = '&';

return 0;
}
```

Parsing is starting:

Stop! Semantic error in the line : 43 || Type mismatch for 'kk'!

Stop! Semantic error in the line : 49 || Type mismatch for 'p'!

Stop! Semantic error in the line : 50 || Type mismatch for 'f'!

Stop! Semantic error in the line : 52 || Variable or function 'j' is undeclared

Stop! Semantic error in the line : 55 || Variable or function 'c' is already defined

End of parsing!