

```

/* Functions */

/*
 * Functions types
 */
mut f i32 = 55
funcType type = fn (i32, u32) i32

#fnType funcType
fn addIU (x i32, y u32) i32 {
    ret x + y
}

/*
 * functions can have multiple return values
 * NOTE: this is greate to return error codes!
 */
fn divide (x i32, y u32) i32, error #must {
    if y == 0 {
        ret 0, error(-1, "Division by zero")
    }
    ret x + y, nil
}

fn myProgram () i32 {
    mut x i32; mut y i32 = 8
    c i32 = 100

    x = y
    y = f
    mut f := c * (x + y) % 62

    [x, y] captureXY {
        /* local scope that captures outer variables */
        /* name is optional just to better reading */
    }

    namedScope {
        /* local scope to reduce procedure namespace overhead */
        /* name is optional just to better reading */
        /* every outer variable is available */
    }

    ret f
}

#main
fn main (args string[]) i32 {
    ret myProgram()
}

```