

# COMP3290 Project Part 2

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## Fails Lexically

```
++  
  This program fails syntactically  
++  
program hello  
  arrays empty[0];  
  //lexical failure  
  x != 2;  
end program hello
```

## Fails Syntactically

```
++  
  This program fails syntactically  
++  
program syntax  
  arrays empty[0];  
  local x;  
  
  //syntax failure  
  x = * 2;  
end program syntax
```

## Fails Semantically

```
++  
  This program fails semantically  
++  
program semantic  
  arrays empty[0];  
  
  //semantic failure  
  x = y;  
end program semantic
```

## Working Programs

```

+//
  Hello world program
+//
program helloworld
  local empty;

  proc hello
    printline "hello, world!";
  end proc hello

  call hello;
end program helloworld

```

```

+//
  Count to ten
+//
program count
  local x;

  proc main
    x = 0;
    loop printindex
      exit printindex when x >= 10;

      x = x + 1;
      printline x;
    end loop printindex
  end proc main

  call main;
end program count

```

## Simple Program

```

+//
  This is a simple program
+//
program hello
  arrays empty[0];

  printline "hello, world!";
end program hello

```