

Solution for Lab Activity #4

```
PROGRAM LabAct4
```

```
! Input: x, where x is any real number.
```

```
! Output:  $(f \circ g)(x)$ , where f and g are defined in the question sheet.
```

```
IMPLICIT NONE
```

```
REAL :: x, gx, fgx
```

```
PRINT *, "Enter your value of x:"
```

```
IF (x >= 3.0) THEN
```

```
    gx = (-6.0/7.0) * x
```

```
ELSE
```

```
    gx = 0.5 * x - 1.0
```

```
END IF
```

```
IF (gx < -1.0) THEN
```

```
    fgx = 2.0 * x - 3.0
```

```
ELSE IF (gx == -1.0)
```

```
    fgx = (2.0/3.0) * x - 1.0
```

```
ELSE
```

```
    fgx = (3.0/7.0) * x - 2.0
```

```
END IF
```

```
PRINT *, "(fog)(",x,")=",fgx
```

```
END PROGRAM LabAct4
```