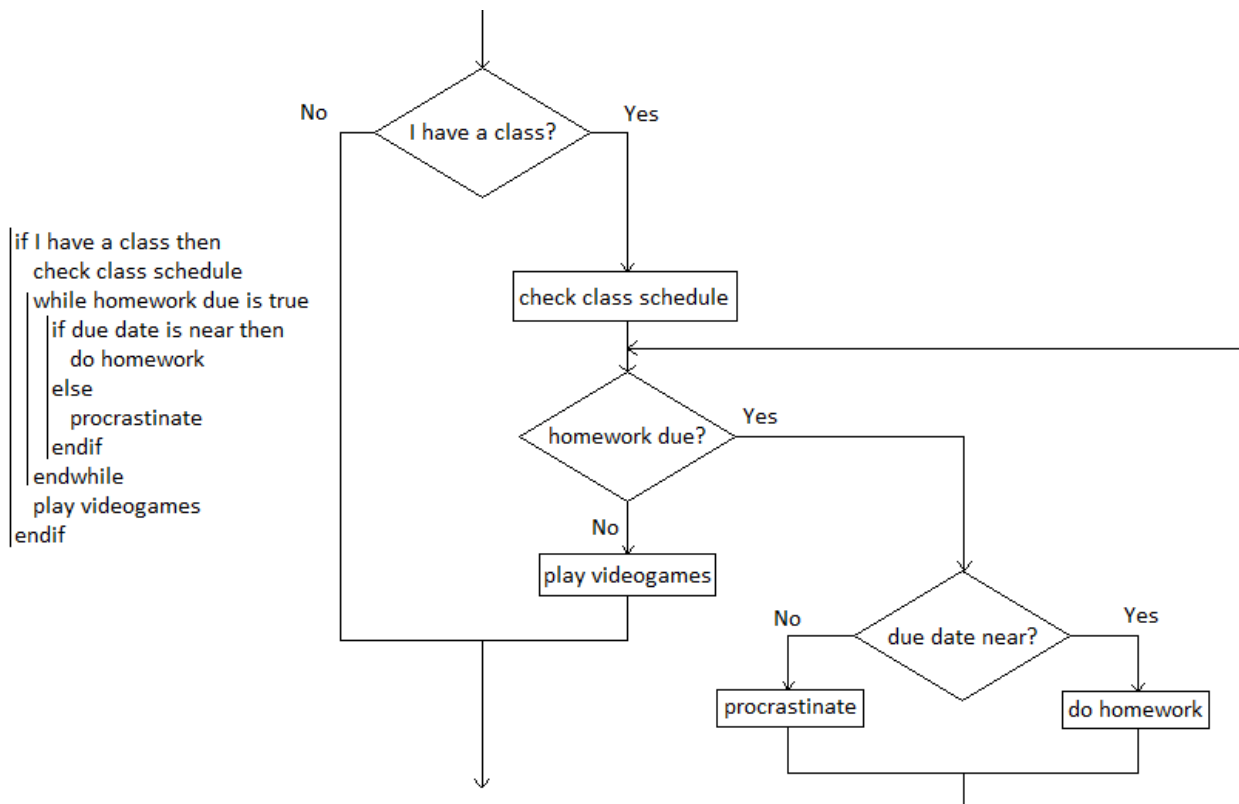
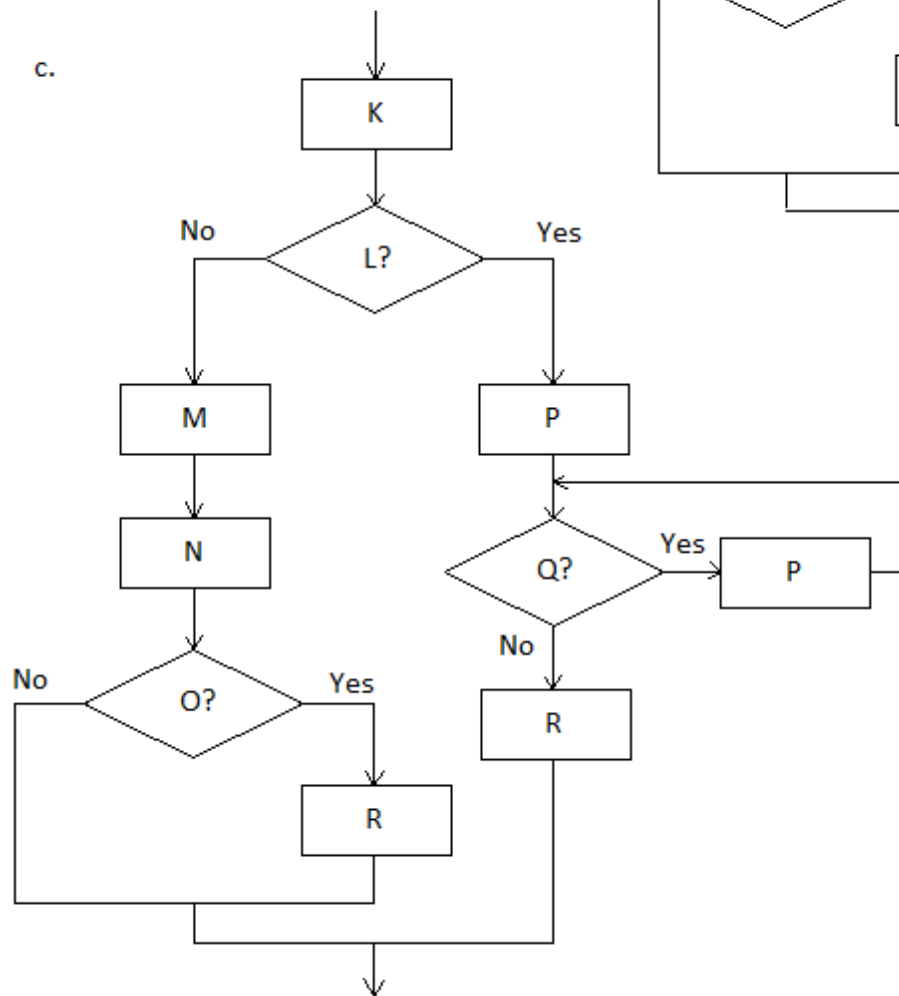
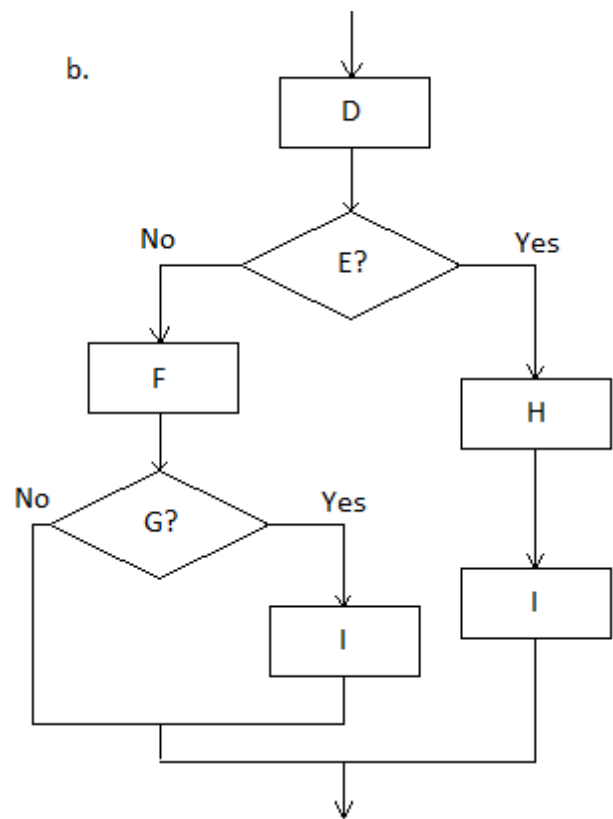
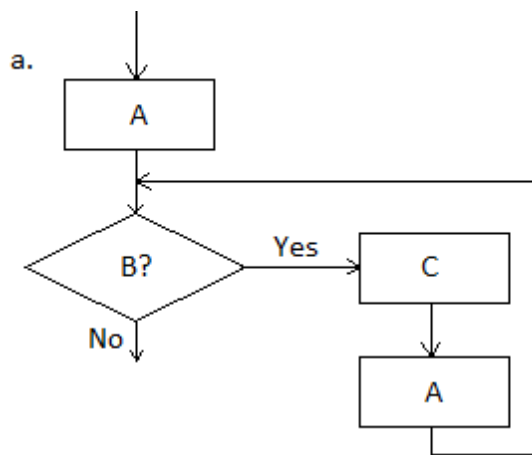


Chapter 3 Farrell Programming Exercises

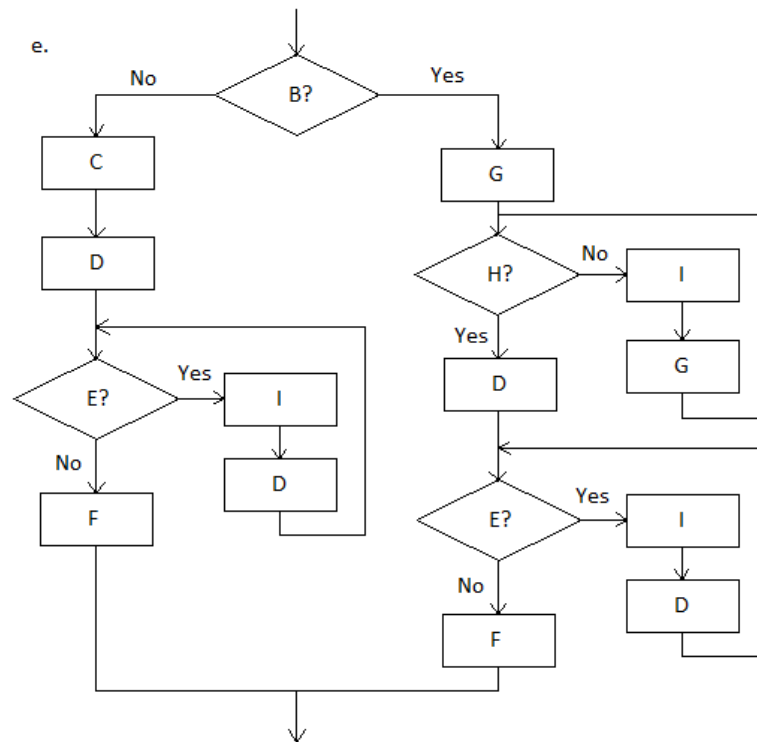
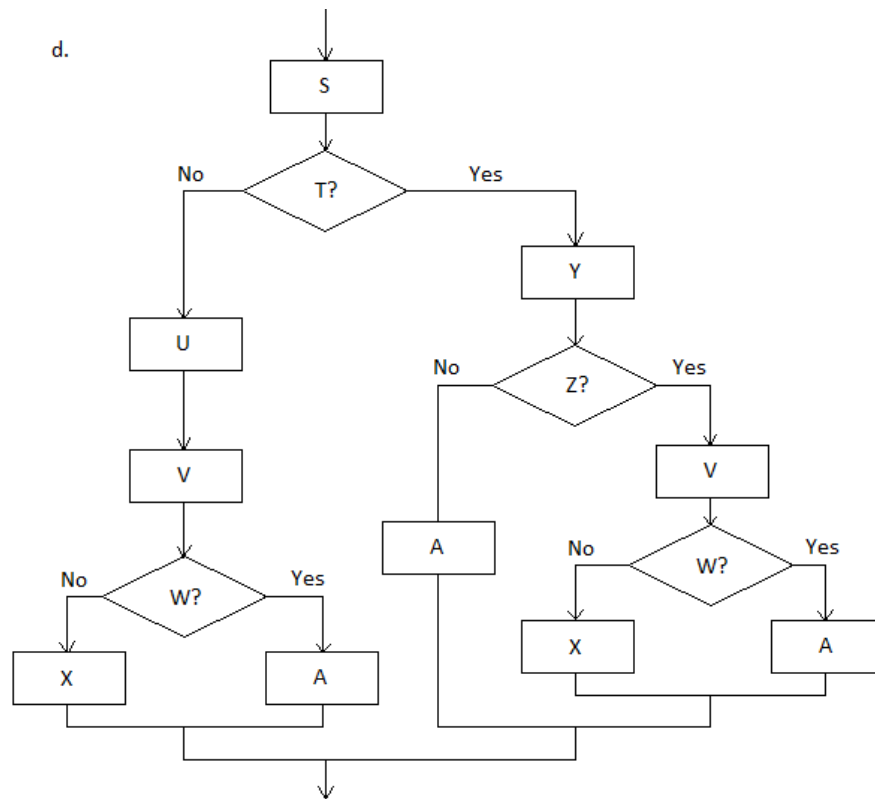
Exercise 1.



Exercise 2.



Exercise 2. (Continued)

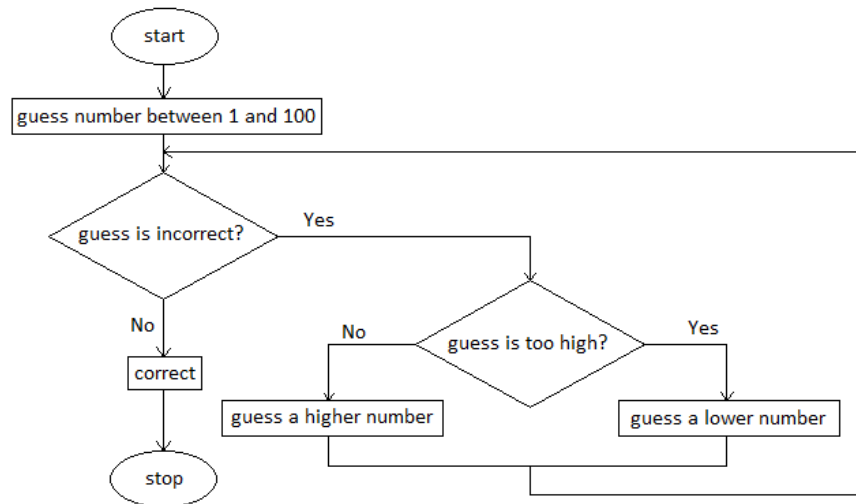


Exercise 3.

- a. do A
 | while B is true
 do C
 do A
 | endwhile
 |
- b. do D
 | if E is true then
 do H
 do I
 | else
 do F
 | if G is true then
 do I
 | endif
 | endif
 |
- c. do K
 | if L is true then
 do P
 | while Q is true
 do P
 | endwhile
 do R
 | else
 do M
 do N
 | if O is true then
 do R
 | endif
 | endif
 |
- d. do S
 | if T is true then
 do Y
 | if Z is true then
 do V
 | if W is true then
 do A
 | else
 do X
 | endif
 | else
 do A
 | endif
 | else
 do U
 do V
 | if W is true then
 do A
 | else
 do X
 | endif
 | endif
 |
- e. if B is true then
 | do G
 | while H is false
 do I
 do G
 | endwhile
 do D
 | while E is true
 do I
 do D
 | endwhile
 do F
 | else
 do C
 do D
 | while E is true
 do I
 do D
 | endwhile
 | do F
 | endif
 |

Exercise 6.

```
start
guess a number between 1 and 100
while guess is incorrect is true
  if guess is too high then
    guess a lower number
  else
    guess a higher number
  endif
endwhile
correct
stop
```

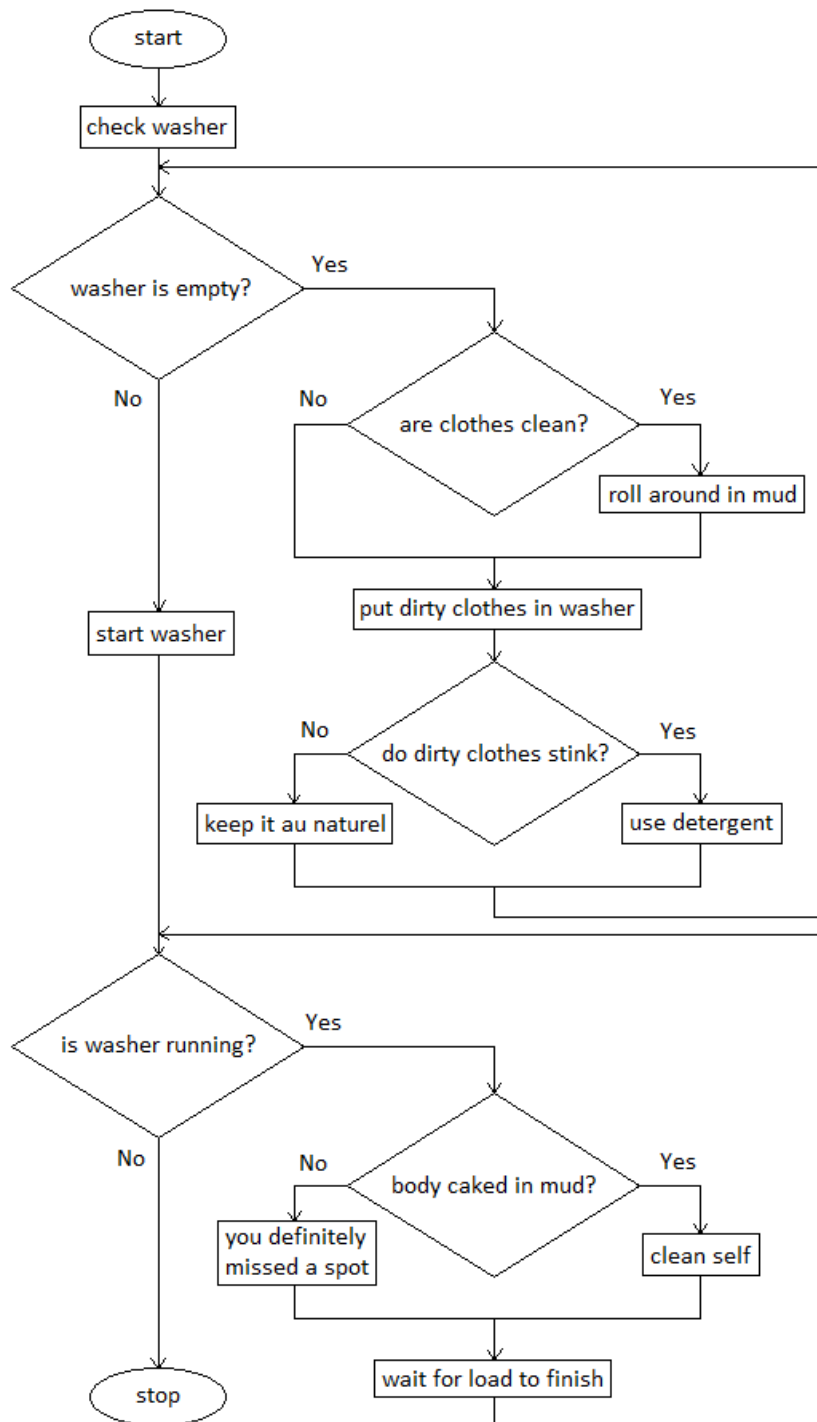


Exercise 8.

```

start
  check washer
  while washer is empty is true
    if clothes are clean then
      roll around in mud
    endif
    put dirty clothes in washer
    if dirty clothes stink then
      use detergent
    else
      keep it au naturel
    endif
  endwhile
  start washer
  while washer running is true
    if body is caked in mud then
      clean self
    else
      you definitely missed a spot
    endif
    wait for load to finish
  endwhile
stop

```



Exercise 10.

```
start
  acquire gift
  while wrapping paper is present is false
    look for wrapping paper
  endwhile
  if know how to wrap gifts then
    wrap gift
  else
    stuff gift in gift bag
  endif
  if gift is bagged then
    stuff tissue paper in gift bag
  endif
  apply name tag
  while special day has arrived is false
    hide gift in closet
  endwhile
  give gift to whomever
stop
```

