

```
if  $X \leq 80$   
  if  $X > 15$   
    if  $Z(t_1 + t_2) > Z(t_3)$   
      Y classified as household contact  
    else  
      Y classified as workplace contact  
    endif  
  else  
    if  $Z(t_1 + t_2) > Z(t_3)$   
      Y classified as social environment contact  
    else  
      Y classified as workplace contact  
    endif  
  endif  
endif
```