

CSC104 Quiz #5

Name:

Assume that DrRacket has been started up in the Intermediate Student with lambda language, and that the following commands have been run (pic:hacker is an image provided by picturing-programs):

```
(require picturing-programs)

; change-color : color -> color
; Produce a new color from c
(check-expect (change-color (make-color 100 200 150 255))
              (make-color 8 200 150 255))
(define (change-color c)
  (make-color
   8
   (color-green c)
   (color-blue c)
   (color-alpha c)))

; 20x20 solid green square
(define s (square 20 "solid" "green"))
```

For full marks, describe or draw what is produced by 4 out of 5 of the following commands. You may find it useful to know that (list-ref (image->color-list s) 7) produces (make-color 0 255 0 255).

1. (map-image change-color pic:hacker)
2. (map-image change-color (map-image change-color pic:hacker))
3. (color-list->bitmap (image->color-list s) 10 40)
4. (color-list->bitmap (image->color-list s) 80 5)
5. (list-ref (image->color-list s) 4)