

IT23283312 – Lab 03

Question 1

a) $c == a + b \parallel !\text{flag}$
 $14 == 6 + 9 \parallel ! 1$
 $14 == 15 \parallel 0$

False

b) $a != 7 \&\& \text{flag} \parallel c >= 6$
 $6 != 7 \&\& 1 \parallel 14 >= 6$

True

c) $!(b <= 12) \&\& a \% 2 == 0$
 $!(9 <= 12) \&\& 6 \% 2 == 0$
 $!(9 <= 12) \&\& 0 == 0$

False

d) $!(a > 5 \parallel c < a + b)$
 $!(6 > 5 \parallel 14 < 6 + 9)$
 $!(6 > 5 \parallel 14 < 15)$

False

Question 2

a) $18 <= \text{age} <= 21$
 $\text{age} >= 18 \&\& \text{age} <= 21$

b) $0.1 < \text{water} < 1.5$
 $\text{water} > 0.1 \&\& \text{water} < 1.5$

c) $\text{year} \% 4 = 0$
 $\text{year} \% 4 == 0$

d) $!(\text{speed} > 55)$

e) $x < y < z$
 $x < y \&\& y < z$

f) $w = 6 \parallel !(w > 3)$

Question 3

F – Fingerprint

R – Retina Scan

A – Access Card

$(F \ \&\& \ R) \ || \ (F \ \&\& \ A) \ || \ (R \ \&\& \ A)$

Question 4

Section 1 – S1

Section 2 – S2

Section 3 – S3

$(S1 \geq 70) \ \&\& \ (S2 \geq 70) \ \&\& \ (S3 \geq 70) \ \&\& \ \{ [(S1 + S2 + S3) / 3] \geq 75 \}$