Anthony Hamlin CIS125-33004 Intro Prog. Logic  
Module 3 – Chapter 2 Assignment

1.) **State the principle of structure theorem and explain the three basic control structures.** The Structure Theorem states that it is possible to write any computer program by using only three basic control structures.

Sequence structure: Consecutive execution of one process after another with no option to deviate.   
Selection structure: A conditional choice depending on either true or false that each has its own process to execute separate from the other.   
Loop structure: A block of code that is executed again and again if a condition is true.

2.)

K

L?

P

P

Q?

M

N

Q?

R

R

Yes

Yes

Yes

No

No

No

c.

A

B?

Yes

No

C

A

a.

Yes

D

E?

F

H

G?

I

I

Yes

No

No

b.

e.

G

B?

i

H?

G

D

E?

i

D

F

C

D

E?

i

D

F

Yes

Yes

Yes

No

No

No

No

Yes

d.

S

T?

Y

U

Z?

V

W?

X

A

V

W??

X

A

Yes

Yes

Yes

Yes

No

No

No

No

A