a. What are the two types of control structures?

Solution:

selection statements and iterations

b. Write the equivalent ternary statement for the code segment below

```
if(y >= 0 && y <= 9)
{
    n = "digit";
}
else
{
    n = "integer";
}
```

Solution:

```
n = (y >= 0 && y <= 9)?("digit"):("integer");
```

c. When is an else-if statement needed?

Solution:

when multiple conditions are required

d. A(n) _____ executes its body indefinitely

Solution:

infinite loop

e. When is an if-else statement needed?

Solution:

when code execution is required for either outcome of a condition