4. Flow Control

Lesson 3:
Jump statements

4.3. Jump Statements

- Jump statements move the point of execution in a program from one place to another place.

- In java we have 3 types of Jump Statements.
  - Break Statement
  - Continue Statement
  - Return Statement

4.3. Jump Statements
4.3.1. Break Statement

- A Break Statement jumps out of a loop and effectively bypasses the loop condition.

- For example, the following loop finds the sum of the numbers 0, 1, 2, …55.

```
int sum = 0;
int i=0;
while (i<100)
{
    sum = sum +i;
    i = i+1;
    if (i==55)
        break;
}
```

4.3. Jump Statements
4.3.2. Continue Statement

- A Continue Statement jumps out of the current iteration of a loop.

- For example, the following loop finds the sum of the numbers 0, 1, 2, …99 excluding the numbers that are multiples of 5.

```
int sum = 0;
for (int i = 0; i<100; i=i+1)
{
    if (i%5==0)
        continue;
    sum = sum +i;
}
```

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4.3. Jump Statements
4.3.3. Return Statement

- A Return Statement terminates the current method (function) and jumps to the place immediately after the function call.

4.3. Jump Statements
4.3.4. Labeled loops

- With a label, program controls transfer to the statement just after the enclosing statement or block of statements carrying the same label.

4.3. Jump Statements
4.3.4. Labeled loops (cont…)

```
for (int i=0; i<3; i++)
  {
    resume:
    for (……………)
      {

          ……..
          if (……..) break resume;

      }

  }
```