Iterative Constructs Java

**LOOP** is defined as a repetative structure in which a statement(s)

are repeated untill the given condition is False

**Three Main type of loops in Java**

for loop,

while loop,

do-while loop

**Two catagories**

Entry controlled (condition is checked before entering body) - for, while

Exit controlled (body is checked before entering the loop) - do-while

**Fixed Iteration** - for, while, do-while

Unfixed Iteration- while, do-while

for (initilization; condition; update\_expression)

{

//loop body

}

while (condition)

{

//loop body

}

do

{

//loop body

} while (condition);

**EXAMPLES: Print "Hello" 10 times on the screen. Using while, do whle**

for (int i = 1; i<=10; i++)

{

System.out.println("Hello");

}

////////////////////////////////////////////////////////////////////////////////////////////

int i = 1;

while (i <=10)

{

System.out.println("Hello");

i++;

}

////////////////////////////////////////////////////////////////////////////////////////////////

int i = 1;

do

{

System.out.println("Hello");

i++;

}while (i <= 9)

////////////////////////////////////////////////////////////////////////////////////////////////

SOLVE: Display all even numbers from 10 to 20.

SOLVE: Enter 10 sumbers from user and show there sum.

when i is incremented by 1 each time, it is called continious Loop.

When i is incremented by more than 1 it is called Step loop.

A break; statement is used to break a loop i.e, exit the loop.

A continue; statement is used to break a loop in between and return to the start of the loop.

SOLVE: What will be the output of the code? also convert the following code from for loop to while loop

for(int i = 7; i <= 35; i = i + 7)

{

System.out.println(i);

}