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);
}
```