```matlab
function sum_up_to_1000()
    i=1;  %innitial i
    n=0;
    while(n<=1000)
        n=n+i;
        i=i+1;
    end
    fprintf('Using while:\tfrom 1 sum up to %d, the sum is %d.
\n',i,n);

    n=0; %reset n
    for i=1:50
        n=n+i;
        if(n>1000)
            break;
        end
    end
    fprintf('Using for and if:\tfrom 1 sum up to %d, the sum is %d.
\n',i,n);
end
```

```
Using while: from 1 sum up to 46, the sum is 1035.
Using for and if: from 1 sum up to 45, the sum is 1035.
```

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