Solution for 1st :-

(1). NO.

This code does not have a side effect considering there are no stored variables to modify.

(b). YES.

This code does have a side effect and that happens in the input part where user gives that input and that output is allocated to X.

(c). YES.

This code has a side effect and that is here output buffer changes. So print statement has side effect.

(d). YES.

This code has side effect that is in third line where the value of variable ‘Sum’ keeps changing every time the code iterates.