

```
P_val = 760;
P_unit = 'Torr';

converted_pressure = convert_pressure (P_val, P_unit);

fprintf('A pressure of %.2f %s is equal to %.2f Pa\n', P_val, P_unit, converted_pressure)
```

```
A pressure of 760.00 Torr is equal to 101324.72 Pa
```

```
function out_pressure = convert_pressure (in_pressure, in_unit)

%This function converts a pressure provided in any of the commonly used
%units into the S.I. unit (Pascals)
% input arguments:
%     in_pressure: numerical value of pressure
%     in_units: units in which pressure is provided
% output argument:
%     out_pressure: value of pressure in Pa

switch in_unit
    case {'psi', 'PSI'}
        out_pressure = in_pressure * 6894.76;

    case {'Bar', 'bar'}
        out_pressure = in_pressure * 100000;

    case {'atm', 'atmosphere', 'atmospheres'}
        out_pressure = in_pressure * 101325;

    case {'Torr', 'torr', 'mmHg', 'mm Hg', 'mm'}
        out_pressure = in_pressure * 133.322;
end

end
```