Recommended names for the signals and the filter's system functions used in Task 1

$x(n)$ is the noisy (voice) signal
$d(n)$ is the desired signal
$v_1(n)$ is the ambient noise received by the primary sensor.
$v_2(n)$ is the ambient noise received by the secondary sensor,
$\hat{v}_1(n)$ is the estimate of $v_1(n)$
$\hat{d}(n)$ is the estimate of $d(n)$, $\hat{d}(n) = x(n) - \hat{v}_1(n)$.
$B(z)$ is the numerator of system function $H(z)= B(z)/A(z)$

*Names for the **stationary noise** case*,

x_st for $x(n)$
v2_st for $v_2(n)$

B_st_wie for $B(z)$ of the FIR Wiener filter
v1_st_wie for $\hat{v}_1(n)$ from the Wiener filter
d_st_wie (=**x_st** – **v1_st_wie**) for $\hat{d}(n)$ from the Wiener filter

B_st_lms for $B(z)$ of the FIR adaptive filter (based on the LMS algorithm)
v1_st_lms for $\hat{v}_1(n)$ from the adaptive filter
d_st_lms (=**x_st** – **v1_st_lms**) for $\hat{d}(n)$ from the adaptive filter

*Names for the **non-stationary noise** case*,

x_nst for $x(n)$,
v2_nst for $v_2(n)$,

B_nst_wie for $B(z)$ of the FIR Wiener filter
v1_nst_wie for $\hat{v}_1(n)$ from the Wiener filter
d_nst_wie (=**x_nst** – **v1_nst_wie**) for $\hat{d}(n)$ from the Wiener filter

B_nst_lms for $B(z)$ of the FIR adaptive filter (based on the LMS algorithm)
v1_nst_lms for $\hat{v}_1(n)$ from the adaptive filter
d_nst_lms (=**x_nst** – **v1_nst_lms**) for $\hat{d}(n)$ from the adaptive filter