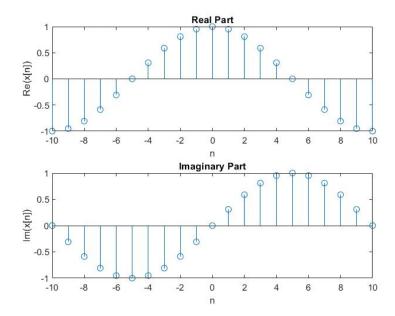
Result:



According to the result above, we can observe that the real part of x[n] is an even function, and the imaginary part of x[n] is an odd function. We can confirm that $x[n] = x_{re}[n] + j*x_{im}[n] = x_{re}[-n] - j*x_{im}[-n]$, which is a **Conjugate symmetric sequence**.