Lab 5: Interpolation/Extrapolation using Newtons forward and backward differencen formulae.

1. Write a Python program to Use Newtons forward interpolation and obtain the interpolating polynomial and hence calculate $y(2)$ for the following

x:	1	3	5	7	9
y:	6	10	62	210	502

2. Write a Python program to use Newton's backward interpolation and obtain the interpolating polynomial and hence calculate $y(8)$ for the following

x :	1	3	5	7	9
y:	6	10	62	210	502