1167-05-6 **Hung-ping Tsao*** (tsaohp.tsao6@gmail.com), 1151 Highland Drive, Novato, CA 94949.
General Famous Numbers: Stirling-Euler-Lah-Bell. Preliminary report.

We shall first introduce Pascal, Stirling, Eulerian, Lah and Bell numbers via sorting and generalize Stirling numbers of both kinds S1(n,k), S2(n,k), Eulerian numbers of two orders E1(n,k), E2(n,k), Lah numbers L(n,k) and ordered Bell numbers OB(a,d) from the natural number based to AP sequences based. There are two separate structures. 1) Stirling: GS(n,k — A(i) — u;v) with GS(1,1) = 1 and A(i) is an arbitrary infinite sequence, u and v are numbers, each indicating which weight to be used among SW(1)=1, SW(2)=A(n-1), SW(3)=A(k) and SW(4)=A(n+k)-1 in GS(n,k)=SW(u)GS(n-1,k-1)+SW(v)GS(n-1,k); 2) Euler: GE(n,k — A(i) — u;v), with GE(1,0) = 1, where u, v each indicating which weight to be used among EW(1)=A(n-1), EW(2)=A(k) and EW(3)=A(n-k) in GE(n,k)=EW(u)GE(n-1,k-1)+EW(v)GE(n-1,k). Therefore, S1ad(n,k)=GS(n, k — A(i)=a+(i-1)d — 1;2), S2ad(n,k)=GS(n, k — A(i)=a+(i-1)d — 1;3), E1ad(n,k)=GE(n, k — A(i)=a+(i-1)d — 1;2), E2ad(n,k)=GE(n, k — A(i)=a+(i-1)d — 3;2), Lad(n,k)=GS(n, k — A(i)=a+(i-1)d — 1;4). Moreover, a peculiar formula involving Stirling, Eulerian and ordered Bell numbers is generalized from the natural number based to AP sequences based and as well. (Received December 22, 2020)