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Zip3vs_@{ $\mathcal{F}_-$ ,  $\mathcal{E}_\mathcal{E}$ } := Module[
{F, u, v, Z, kk, jj, $m = 0, m, n},

Do[Z[0, kk] =  $\mathcal{E}[\text{kk} + 1]$ , {kk, 0,  $\mathcal{E}[\$]$ }] ;

F[u_, v_] := F[u, v] = CF@If[Wt[u] + Wt[v] == {1, 0},  $\partial_{u,v}\mathcal{F}$ , 0];

Z[m_, kk_, u_] := Z[m, kk, u] =  $\partial_u Z[m, kk]$ ;

Z[m_, kk_, u_, v_] := Z[m, kk, u, v] =  $\partial_v Z[m, kk, u]$ ;

For[m = 0, m ≤ 2 $m, ++m, For[kk = 0, kk ≤  $\mathcal{E}[\$]$ , ++kk,

Z[m + 1, kk] = CF@Sum[

If[F[u, v] == 0,

 $\frac{F[u, v]}{2(m+1)}$  (Z[m, kk, u, v] + Sum[Z[n, jj, u] * Z[m - n, kk - jj, v], {n, 0, m},

{jj, 0, kk}])],

{u, vs}, {v, vs}]]];

If[Z[m + 1, kk] != 0, $m = m + 1]

]]];

CF /@ ({

 $\mathcal{F}$  - Sum[F[u, v] * u * v / 2, {u, vs}, {v, vs}],

 $\mathbb{E} @@ \text{Table}[\text{Sum}[Z[m, kk], \{m, 0, \$m\}], \{kk, 0, \mathcal{E}[\$]\}]

} /. \text{Table}[v \rightarrow 0, \{v, vs\}])

]$ 
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