

```
In [2]:  $\mathcal{G}(x,t) = \exp(2t * x - t^2)$  # generating function;  $\mathcal{G}$  is typed as \scrG<TAB>  
  
        xn = set_variables("x", numvars=1, order=10)  
  
        x = xn[1]  
  
        t = Taylor1([zero(x), one(x)], 10) # Taylor1{TaylorN{Float64}}  
  
        gf =  $\mathcal{G}(x, t)$  # Taylor1 expansion of  $\mathcal{G}$   
  
        HH(n::Int) = derivative(n, gf) # n-th derivative of `gf`  
  
        HH(6)
```

```
Out [2]: - 120.0 + 720.0  $x_1^2$  - 480.0  $x_1^4$  + 63.99999999999999  $x_1^6$ 
```