(var mr: Int = 1; t2; t3; t4; t5, [])|[]

[E-Var-Init]-> ((var mr: Int = 1,[]); t2; t3; t4; t5, [])|[]

[E-Var]-> (var mr: Int = (1,\_); t2; t3; t4; t5, [])|[]

[E-Var-next]-> (val aM:Int → Int = (x:Int) => x + mr; t3; t4; t5,[mr->ℓ1])|[ℓ1=(1,\_)]

[E-Val-Init]-> (val aM:Int → Int = ((x:Int) => x + mr,[mr->ℓ1]); t3; t4; t5,[mr->ℓ1])|[ℓ1=(1,\_)]

[E-Val-Next] -> (aM(10); t4; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1])]

[E-Seq-Init] -> ((aM(10) ,[ mr->ℓ1, aM-> ℓ2]); t4; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1])]

[E-Seq + E-App-Init] -> (((aM,[ mr->ℓ1, aM-> ℓ2])(10,\_); t4; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1])]

[E-Seq + E-App1 + E-Var]-> ((((x:Int) => x + mr,[mr->ℓ1]) (10,\_)); t4; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1])]

[E-Seq + E-App-Abs]-> ((x + mr, [mr->ℓ1,x-> ℓ3]);t4; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-Seq + E-Sum-Init]-> (((x, [mr->ℓ1,x-> ℓ3]) + (mr, [mr->ℓ1,x-> ℓ3]));t4; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-Seq + E-Sum1 + E-Var] -> (((1,\_) + (mr, [mr->ℓ1,x-> ℓ3]));t4; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-Seq + E-Sum2 + E-Var] -> (((1,\_) + (3,\_));t4; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-Seq + E-App-Sum] -> ((4,\_); t4; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-SeqR] ->( mr = 9999; t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-Seq -Init] ->( (mr = 9999,[ mr->ℓ1, aM-> ℓ2]); t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-Seq + E-Ass -Init] ->( ((mr,[ mr->ℓ1, aM-> ℓ2]) = (9999,\_)); t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(1,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-Seq + E-Ass]->((unit,\_); t5,[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(9999,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-SeqR] -> (aM(10),[ mr->ℓ1, aM-> ℓ2])|[ ℓ1=(9999,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-App-Init] -> (aM,[ mr->ℓ1, aM-> ℓ2])(10\_)|[ ℓ1=(9999,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-App-1 + E-Var] -> ((x:Int) => x + mr,[mr->ℓ1]))(10,\_))|[ ℓ1=(9999,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_)]

[E-App-Abs] -> (x + mr, [mr->ℓ1, x-> ℓ4]) |[ ℓ1=(9999,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_), ℓ4 = (10,\_)]

[E-Sum-Init] -> ((x, [mr->ℓ1, x-> ℓ4] ) + (mr, [mr->ℓ1, x-> ℓ4])) |[ ℓ1=(9999,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_), ℓ4 = (10,\_)]

[E-Sum1 + E-Var] -> ((10,\_) + (mr, [mr->ℓ1, x-> ℓ4])) |[ ℓ1=(9999,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_), ℓ4 = (10,\_)]

[E-Sum2 + E-Var] -> ((10,\_) + (9999,\_)) |[ ℓ1=(9999,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_), ℓ4 = (10,\_)]

[E-Sum] -> (10009,\_)|[ ℓ1=(9999,\_), ℓ2= ((x:Int) => x + mr,[mr->ℓ1]), ℓ3 = (10,\_), ℓ4 = (10,\_)]