

## add

<pre> Fixpoint add (m n : nat): match m with   0 =&gt; n   S m' =&gt; add m' (S n) end. </pre>	<pre> call stack  : [] stack       : [] redex stack : [] guard env   : [] loc env     : [] </pre>
<pre> fun (n : nat) =&gt; match m with   0 =&gt; n   S m' =&gt; add m' (S n) end. </pre>	<pre> call stack  : [tLambda] stack       : [] redex stack : [NoNeed] guard env   : [Large] loc env     : [m, add] </pre>
<pre> match m with   0 =&gt; n   S m' =&gt; add m' (S n) end. </pre>	<pre> call stack  : [tCase, tLambda] stack       : [] redex stack : [NoNeed] guard env   : [Bound{1}, Large] loc env     : [n, m, add] </pre>
<pre> m (* discriminant *) </pre>	<pre> call stack  : [tRel, tCase, tLambda] stack       : [] redex stack : [NoNeed, NoNeed] guard env   : [Bound{1}, Large] loc env     : [n, m, add] </pre>
<pre> n (* 0-th branch *) </pre>	<pre> call stack  : [tRel, tCase, tLambda] stack       : [] redex stack : [NoNeed, NoNeed] guard env   : [Bound{1}, Large] loc env     : [n, m, add] </pre>
<pre> fun m' : nat =&gt; add m' (S n) (* 1-st branch *) </pre>	<pre> call stack  : [tLambda, tCase, tLambda] stack       : [] redex stack : [NoNeed, NoNeed] guard env   : [Bound{1}, Large] loc env     : [n, m, add] </pre>
<pre> add m' (S n) </pre>	<pre> call stack  : [tApp, tCase, tLambda] stack       : [] redex stack : [NoNeed, NoNeed] guard env   : [Strict, Bound{1}, Large] loc env     : [m', n, m, add] </pre>

<code>S n</code>	<code>call stack : [tApp, tApp, tCase, tLambda]</code> <code>stack : []</code> <code>redex stack : [NoNeed, NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [m', n, m, add]</code>
<code>n</code>	<code>call stack : [tRel, tApp, tApp, tCase, tLambda]</code> <code>stack : []</code> <code>redex stack : [NoNeed, NoNeed, NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [m', n, m, add]</code>
<code>S</code>	<code>call stack : [tConstruct, tApp, tApp, tCase, tLambda]</code> <code>stack : [SClosure n]</code> <code>redex stack : [NoNeed, NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [m', n, m, add]</code>
<code>m'</code>	<code>call stack : [tRel, tApp, tCase, tLambda]</code> <code>stack : []</code> <code>redex stack : [NoNeed, NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [m', n, m, add]</code>
<code>add</code>	<code>call stack : [tRel, tApp, tCase, tLambda]</code> <code>stack : [SClosure m', SClosure (S n)]</code> <code>redex stack : [NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [m', n, m, add]</code>
<pre>(* internal *) check_is_subterm   (subterm_specif m')   (wf_paths nat) == NeedReduceSubterm {}</pre>	<code>call stack : [tRel, tApp, tCase, tLambda]</code> <code>stack : [SClosure m', SClosure (S n)]</code> <code>redex stack : [NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [m', n, m, add]</code>
<pre>(* internal *) reduce_if   (needreduce discriminant       needreduce branches)</pre>	<code>call stack : [tRel, tApp, tCase, tLambda]</code> <code>stack : []</code> <code>redex stack : [NoNeed]</code> <code>guard env : [Bound{1}, Large]</code> <code>loc env : [n, m, add]</code>

## add\_typo

<pre> Fixpoint add_typo (m n : nat) := match m with   0 =&gt; n   S unused =&gt; add_typo m (S n) end. </pre>	<pre> call stack : [] stack      : [] redex stack : [] guard env  : [] loc env    : [] </pre>
<pre> fun (n : nat) =&gt; match m with   0 =&gt; n   S unused =&gt; add m (S n) end. </pre>	<pre> call stack : [tLambda] stack      : [] redex stack : [NoNeed] guard env  : [Large] loc env    : [m, add] </pre>
<pre> match m with   0 =&gt; n   S unused =&gt; add m (S n) end. </pre>	<pre> call stack : [tCase, tLambda] stack      : [] redex stack : [NoNeed] guard env  : [Bound{1}, Large] loc env    : [n, m, add] </pre>
<pre> m (* discriminant *) </pre>	<pre> call stack : [tRel, tCase, tLambda] stack      : [] redex stack : [NoNeed, NoNeed] guard env  : [Bound{1}, Large] loc env    : [n, m, add] </pre>
<pre> n (* 0-th branch *) </pre>	<pre> call stack : [tRel, tCase, tLambda] stack      : [] redex stack : [NoNeed, NoNeed] guard env  : [Bound{1}, Large] loc env    : [n, m, add] </pre>
<pre> fun unused : nat =&gt; add m (S n) (* 1-st branch *) </pre>	<pre> call stack : [tLambda, tCase, tLambda] stack      : [] redex stack : [NoNeed, NoNeed] guard env  : [Bound{1}, Large] loc env    : [n, m, add] </pre>
<pre> add m (S n) </pre>	<pre> call stack : [tApp, tCase, tLambda] stack      : [] redex stack : [NoNeed, NoNeed] guard env  : [Strict, Bound{1}, Large] loc env    : [unused, n, m, add] </pre>

<code>S n</code>	<code>call stack : [tApp, tApp, tCase, tLambda]</code> <code>stack : []</code> <code>redex stack : [NoNeed, NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [unused, <i>n</i>, <i>m</i>, add]</code>
<code>m</code>	<code>call stack : [tRel, tApp, tCase, tLambda]</code> <code>stack : []</code> <code>redex stack : [NoNeed, NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [unused, <i>n</i>, <i>m</i>, add]</code>
<code>add</code>	<code>call stack : [tRel, tApp, tCase, tLambda]</code> <code>stack : [SClosure <i>m</i>, SClosure (S <i>n</i>)]</code> <code>redex stack : [NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [unused, <i>n</i>, <i>m</i>, add]</code>
<code>(* internal *)</code> <code>check_is_subterm</code> <code>  (subterm_specif m)</code> <code>  (wf_paths nat)</code> <code>== NotSubterm</code>	<code>call stack : [tRel, tApp, tCase, tLambda]</code> <code>stack : [SClosure <i>m</i>, SClosure (S <i>n</i>)]</code> <code>redex stack : [NoNeed, NoNeed]</code> <code>guard env : [Strict, Bound{1}, Large]</code> <code>loc env : [unused, <i>n</i>, <i>m</i>, add]</code>