

```
/* ZONE root */  
newzone(root)?
```

```
entree(2,3).
```

```
sortie(9,8).
```

```
mur(1,1).
```

```
mur(1,2).
```

```
mur(1,3).
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```
mur(1,4).
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```
mur(1,5).
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```
mur(1,6).
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```
mur(1,7).
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```
mur(1,8).
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```
mur(1,9).
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```
mur(1,10).
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```
mur(2,1).
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```
mur(2,4).
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```
mur(2,5).
```

```
mur(2,10).
```

```
mur(3,1).
```

```
mur(3,3).
```

```
mur(3,7).
```

```
mur(3,8).
```

```
mur(3,10).
```

```
mur(4,1).
```

```
mur(4,5).
```

```
mur(4,7).
```

```
mur(4,10).
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```
mur(5,1).
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```
mur(5,3).
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```
mur(5,4).
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```
mur(5,5).
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```
mur(5,6).
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```
mur(5,7).
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```
mur(5,9).
```

```
mur(5,10).
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```
mur(6,1).
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```
mur(6,5).
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```
mur(6,9).
```

```
mur(6,10).
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```
mur(7,1).
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```
mur(7,2).
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```
mur(7,3).
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```
mur(7,5).
```

```
mur(7,7).
```

```
mur(7,8).
```

```
mur(7,9).
```

```
mur(7,10).
```

```
mur(8,1).
```

```
mur(8,10).
```

```
mur(9,1).
```

```
mur(9,2).
```

```
mur(9,4).
```

```
mur(9,5).
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```
mur(9,6).
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```
mur(9,7).
```

```
mur(9,9).
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```
mur(9,10).
```

```
mur(10,1).
```

```
mur(10,2).
```

```
mur(10,3).
```

```
mur(10,4).
```

```
mur(10,5).
mur(10,6).
mur(10,7).
mur(10,8).
mur(10,9).
mur(10,10).
```

```
labyrinthe :- clear_scr, posx(0), posy(0), laby.
```

```
laby :- entree(L,C), go([[L,C]],Chemin_retourne), reverse(Chemin_retourne,Chemin), clear_scr,
        dessine(Chemin), posx(17), posx(0), write('Un chemin trouve est: '), nl, write(Chemin), getc(_), fail.
laby :- nl, write('Fin de la recherche.').
```

```
go([[L,C]]R,[[L,C]]R) :- sortie(L,C), !.
go([Point|Reste],Parcours) :- avance(Point,[LS,CS]), not mur(LS,CS), not member([LS,CS],[Point|Reste]),
    go([[LS,CS],Point|Reste],Parcours).
```

```
avance([L,C],[LS,C]) :- LS is L - 1.
avance([L,C],[L,CS]) :- CS is C + 1.
avance([L,C],[LS,C]) :- LS is L + 1.
avance([L,C],[L,CS]) :- CS is C - 1.
```

```
member(X,[X|_]) :- !.
member(X,[_|R]) :- member(X,R).
```

```
reverse(X,Y) :- reverse1([],X,Y).
```

```
reverse1(S,[],S).
reverse1(Pile,[X|E],S) :- reverse1([X|Pile],E,S).
```

```
dessine(Chemin) :- dessine_mur, dessine1(Chemin).
```

```
dessine_mur :- mur(Y,X), posx(X), posy(Y), write('U'), fail.
dessine_mur.
```

```
dessine1([]).
dessine1([[Y,X]]R) :- posx(X), posy(Y), write(x), dessine1(R).
```

```
/* END OF ZONE root */
```