Somehow, the result with [check only path] & [check only path+condition] have almost identical result, actually, the one with [path+condition] has more result happen, ??????? no idea why this happen.

**questPathMainLoop\_Done**(**GC**,**GL**,**AC**,**AR**,**LA**,**P**,**LC**,**PF**)

:-

%memberlist(GC,AC), // Nolonger working, obsolete

%memberlist(GL,AL), // Nolonger working, obsolete

**getCharIsAliveFromList**(**AC**,**player**,**true**),

\+**pathExist**(**P**),

\+**conditionExist**(**AC**),

**memberlist**(**GC**,**AC**),

**checkSpecialCondition**(**GL**,**AC**).

????? Why the 2nd [getCharNameFromList] don't get a char, but the above does ???

%Direct Attack

**questPathMainLoop\_PlayerAction**(**GC**,**GL**,**AC**,**AR**,**LA**,**P**,**LC**,**PF**,**ACReturn**,**ARReturn**,**LAReturn**,**P2**,**LC2**)

:-

% 1st check if player can perform the action

% 2nd call the proper related action

**getCharNameFromList**(**AC**,**\_**,**TarName**), %select target (all character)

**getCharNameFromList**(**AC**,**\_**,**TarName2**), % ?????? Why this don't get a char, but the above does???

This one don’t return false, but keep going. The yellow highline don’t return false and backtrack, but it create [FRIEND] as [\_1215 , anonymous variable] and keep going.

**action\_attack**(**AC**,**AR**,**KillerName**,**TargetName**,**P**,**ACNew2**,**ARRE**,**PRE**) :-

**getCharacterFromList**(**AC**,**KillerName**,[**NameKiller**,**A1Killer**,**V1Killer**,**A2Killer**,**V2Killer**,**ID\_KILLER**]),

**getCharacterFromList**(**AC**,**TargetName**,[**NameTarget**,**A1Target**,**V1Target**,**A2Target**,**V2Target**,**ID\_TARGET**]),

**getCharIsAliveFromList**(**AC**,**TargetName**,**true**),

(

%if there friend at same place, and friend level higher than attack

**existRelationship**(**AR**,**friend**,**TargetName**,**FRIEND**),

**nonvar**(**FRIEND**),

**getCharCurrentLocationFromList**(**AC**,**NameTarget**,**B**),

**getCharCurrentLocationFromList**(**AC**,**FRIEND**,**B**),

**getCharLevelFromList**(**AC**,**FRIEND**,**LVLD**),

**getCharLevelFromList**(**AC**,**KillerName**,**LVLK**),

**LVLK** < **LVLD**

**ANSWER: Turnout, the AR isn’t return properly at the yellow highlight (it was [ACRS\_B,ARRS\_B,….] which cannot return to the root QPML\_Resolve/10 )**

**questPathMainLoop\_Resolve**(**AC**,**AR**,**LA**,**P**,**LC**,**ACRS**,**ARRS**,**LARS**,**PRS**,**LCRS**)

:-

%If it's possible to resolve, loop until no longer possible to resolve

(**resolving**(**AC**,**AR**,**LA**,**P**,**LC**,**AC2**,**AR2**,**LA2**,**P2**,**LC2**) ->

**questPathMainLoop\_React**(**AC2**,**AR2**,**LA2**,**P2**,**LC2**,**ACRS**,**ARRS**,**LARS**,**PRS**,**LCRS**)

**[]**

This one (A, B) ดันเท่ากันใน debug แล้วติดลูป (เหลือง)

**reacting2**([(**A**, **B**)|**T**],**GC**,**GL**,**AC**,**AR**,**LA**,**P**,**LC**,**ACRS**,**ARRS**,**LARS**,**PRS**,**LCRS**)

:-

%getCharNameFromList(AC,\_,A), %any charA

%getCharNameFromList(AC,\_,B), %any charB

**getCharIsAliveFromList**(**AC**,**A**,**true**), %The character must be alive

**getCharIsAliveFromList**(**AC**,**B**,**true**), %The character must be alive

**existCharListStatusFromList**(**AC**,**A**,**poison**), %is poison?

**existCharListSkillFromList**(**AC**,**B**,**heal**), %can char2 cure poison?

**delete**(**AC**,[**A**,**listStatus**,**poison**,**\_**,**\_**,**\_**],**AC2**),

**append**(**P**,[**friend\_heal\_poison**],**P2**),

**append**(**P2**,[**A**],**P3**),

**append**(**P3**,[**B**],**P4**),

**reacting2**(**T**,**GC**,**GL**,**AC**,**AR2**,**LA**,**P**,**LC**,**ACRS**,**ARRS**,**LARS**,**PRS**,**LCRS**).

ตัวข้อมูลใน debug ที่ติดลูป

GC = [[mob\_npc\_1, isAlive, false, z, zz, zzz], [player, sameLocation, mob\_npc\_2, z, zz, zzz]]

GL = []

AC = [A, [\_3290, isAlive, \_3302, \_3308, \_3314, \_3320], [\_3380, isAlive, \_3392, \_3398, \_3404, \_3410], [\_3470, isAlive, \_3482, \_3488, \_3494|...], [\_3560, isAlive, \_3572, \_3578|...], [\_3650, isAlive, \_3662|...], [\_3740, isAlive|...], [\_3830|...], [...|...]|...]

AR = [[friend, mob\_npc\_1, mob\_npc\_1]]

LA = 1

P = [\_3032, friend\_block, mob\_npc\_1, player, direct\_attack, start\_quest, [start]]

LC = 2

A = B

T = [([A, isAlive, \_3248, \_3254, \_3260, \_3266], [\_3290, isAlive, \_3302, \_3308, \_3314, \_3320]), ([[A, isAlive, \_3248, \_3254, \_3260|...], isAlive, \_3338, \_3344, \_3350, \_3356], [\_3380, isAlive, \_3392, \_3398, \_3404, \_3410]), ([[[A, isAlive, \_3248|...], isAlive, \_3338, \_3344|...], isAlive, \_3428, \_3434, \_3440|...], [\_3470, isAlive, \_3482, \_3488, \_3494|...]), ([[[[A|...], isAlive|...], isAlive, \_3428|...], isAlive, \_3518, \_3524|...], [\_3560, isAlive, \_3572, \_3578|...]), ([[[[...|...]|...], isAlive|...], isAlive, \_3608|...], [\_3650, isAlive, \_3662|...]), ([[[...|...]|...], isAlive|...], [\_3740, isAlive|...]), ([[...|...]|...], [\_3830|...]), ([...|...], [...|...]), (..., ...)|...]

(cycle) A=[A, isAlive, true, \_3218, \_3224, \_3230]

If react2 always came in pair, how to check for single NPC??? (ล่างใช้แค่ A)

%jailbreak (undo capture status) if has lockpick in inventory

**reacting2**([(**A**, **B**)|**T**],**GC**,**GL**,**AC**,**AR**,**LA**,**P**,**LC**,**ACRS**,**ARRS**,**LARS**,**PRS**,**LCRS**) :-

% Do something on A and B

**getCharIsAliveFromList**(**AC**,**A**,**true**), %The character must be alive

**getCharCurrentLocationFromList**(**AC**,**A**,**jail**), %Must be at jail

**existCharListStatusFromList**(**AC**,**A**,**captured**), % Must be already captured,

**getItemIDUsingName**(**AC**,**lockpick**,**LockPick\_ID**),

**getItemOwnerNameUsingID**(**AC**,**LockPick\_ID**,**A**).

ถ้าสั่ง fail มันจะ print คำตอบเดิมก่อน 1 ครั้ง ก่อนจะ false , ต้องหาวิธีเขียนใหม่ให้ fail เลยไม่งั้นเวลาหา path ใหม่มันจะได้ path เดิมสองอัน

%getCharPair(

%[[jack,isAlive,true,z,zz,zzz],[jack,level,true,z,zz,zzz],[ken,isAlive,true,z,zz,zzz],[ryu,isAlive,true,z,zz,zzz]],

%[[jack,isAlive,true,z,zz,zzz],[jack,level,true,z,zz,zzz],[ken,isAlive,true,z,zz,zzz],[ryu,isAlive,true,z,zz,zzz]],

%ANS).

**getCharPair**([], **\_**, []).

**getCharPair**(**\_**, [], []).

**getCharPair**([**H**|**T**], **AC**, **Ans**) :-

**pair**(**H**, **AC**, **Ans1**),

**getCharPair**(**T**, **AC**, **Ans2**),

**append**(**Ans1**, **Ans2**, **Ans**).

**pair**(**\_**, [], []).

**pair**(**A**, [**B**|**T**], [(**NameA**,**NameB**)|**Ans**]) :-

**isAlive**(**A**),

**isAlive**(**B**),

**nameChar**(**A**,**NameA**),

**nameChar**(**B**,**NameB**),

**pair**(**A**, **T**, **Ans**).

**pair**(**A**, [**\_**|**T**], **Ans**):-

\+**isAlive**(**A**),

**pair**(**A**,**T**,**Ans**).

**pair**(**A**,[**B**|**T**],**Ans**):-

\+**isAlive**(**B**),

**pair**(**A**,**T**,**Ans**).

**isAlive**([**\_**, **isAlive**, **\_**, **\_**, **\_**, **\_**]).

**nameChar**([**A**,**\_**,**\_**,**\_**,**\_**,**\_**],**A**).

Code not working

**%seperateGoalType**(**All\_Condition,Goal\_Condition, Normal\_Goal**, **Special\_Goal**).

**seperateGoalType**(**\_**,[],[],[]).

**seperateGoalType**(**AC**,[[**ANYNAME**,**sameLocation**,**ANYNAME2**,**A**,**B**,**C**]|**AT**],**GC**,[[**ANYNAME**,**sameLocation**,**ANYNAME2**,**A**,**B**,**C**]|**GLT**])

:-

**getCharNameFromList**(**AC**,**\_**,**A**),

**getCharNameFromList**(**AC**,**ANYNAME2**,**B**),

**A** \= **B**,

**seperateGoalType**(**AC**,**AT**,**GC**,**GLT**).

**seperateGoalType**(**AC**,[**AH**|**AT**],[**AH**|**GCT**],**GL**)

:-

**seperateGoalType**(**AC**,**AT**,**GCT**,**GL**).

Output below

A = [[player, sameLocation, jack, z, zz, zzz], [player, currentLocation, market, z, zz, zzz], [jack, sameLocation, john, z, zz, zzz]],

B = [] ;

-Why **N** **is** **N2**+1. Must be below lengthList(T,N2) to work??

**lengthList**([],**0**).

**lengthList**([**H**|**T**],**N**)

:-

% N is N2+1, %\*\*\*\*\* IF this line is here, this will not work \*\*\*\*\*\*

**lengthList**(**T**,**N2**),

**N** **is** **N2**+1.

-In [TestLoop], below code don’t work as expected. It didn’t go from

**[attack,attack,attack,attack]** to **[attack,attack,attack,hire],** but instead goto

**[attack,attack,attack,attack,attack]** then loop into infinity;

**questPathMainLoop**(**A**,**P**)

:-

( **questPathMainLoop\_Done**(**A**,**P**)

; **questPathMainLoop\_Continue**(**A**,**P**)

).

**writeToFile**(**P**,**P**).

**questPathMainLoop\_Done**(**P**,**P**)

:-

**lengthList**(**P**,4).

**questPathMainLoop\_Done**(**P**,**P**)

:-

**lengthList**(**P**,5).

Below code actually loop **[attack,attack,attack,hire],** but don’t go to **[attack,attack,attack,attack,attack]**

**questPathMainLoop**(**A**,**P**)

:-

( **questPathMainLoop\_Done**(**A**,**P**) -> **writeToFile**(**A**,**P**)

; **questPathMainLoop\_Continue**(**A**,**P**)

).

-Idea to cleanly delete all [Forest,listItem,,poison\_plant,\_,\_,ID] without knowing how many of this there is? And also append them back with modified value.

**action\_pick\_up**(**AC**,**AR**,**ItmID**,**PICKER**,**P5**,**ACNew2**,**AR2**,**P6**)

:-

**getCharacterFromList**(**AC**,**PICKER**,[**PICKER**,**A1PICKER**,**V1PICKER**,**A2PICKER**,**V2PICKER**,**ID**]),

**getItemCurrentLocationUsingID**(**AC**,**ItmID**,**ItmLo**),

**getItemIsOnGroundUsingID**(**AC**,**ItmID**,**ItmName**),

[**forest**,**listItem**,**poison\_plant**,**itemName**,**poison\_plant**,1**0**1**000**],

[**forest**,**listItem**,**poison\_plant**,**ownerName**,**NULL**,1**0**1**000**],

[**forest**,**listItem**,**poison\_plant**,**isOnGround**,**true**,1**0**1**000**],

[**forest**,**listItem**,**poison\_plant**,**currentLocation**,**Forest**,1**0**1**000**],

[**forest**,**listItem**,**poison\_plant**,**typeOfItem**,**supply**,1**0**1**000**],

[**forest**,**listItem**,**poison\_plant**,**typeOfFunction**,**consumable**,1**0**1**000**],

**delete**(**AC**,[**ItmLo**,**listItem**,**ItmName**,**itemName**,**ItmName**,**ItmID**],**ACNew**),

**delete**(**AC**,[**ItmLo**,**listItem**,**ItmName**,**isOnGround**,**true**,**ItmID**],**ACNew**),

**append**(**ACNew**,[**NameTarget**,**isAlive**,**false**,**A2Target**,**V2Target**],**ACNew2**),

**legal**(**Z**,[]).

**legal**(**Z**,[**H**|**T**]) :- **Z** \== **H**, **legal**(**Z**,**T**).

**pathRE**(**X**,**X**,[**X**|**T**]).

**pathRE**(**X**,**Y**,[**X**|**A**]) :- **a**(**X**,**Z**), **legal**(**Z**,**A**),**pathRE**(**Z**,**Y**,**A**).

%A = [a, e, f, c] ;

%A = [a, e, f, c, \_4508114] ;

%A = [a, e, d, a, b, c] ;

%A = [a, e, f, c, \_4508114, \_4508120] ;

**pathRE**(**X**,**X**,T).

**pathRE**(**X**,**Y,**T) :- **a**(**X**,**Z**), **legal**(**Z**,**T**),**pathRE**(**Z**,**Y**,**[Z|T]**).

True;

True;

True;

false

**routing**(**X**, **Y**, [**X**, **Y**]) :- **a**(**X**, **Y**).

**routing**(**X**, **Y**, [**X**|**A**]) :- **a**(**X**, **Z**), **legal**(**Z**,**A**), **routing**(**Z**, **Y**, **A**).

%A = [a, e, f, c] ;

%A = [a, e, d, a, b, c] ;

%A = [a, e, d, a, e, f, c] ;

%A = [a, e, d, a, b, f, c] ;

%A = [a, e, d, a, e, d, a, b, c]

1. ASK: why the [pathRE] has error (number…), but the lower don’t
2. ASK: consult below not working and didn’t call the procedure from Utility.pl

consult('c:/Users/user/Desktop/Prolog Test/TestPrologPDT/Utility.pl').

ERROR: [Thread pdt\_console\_client\_0\_Default Process] Undefined procedure: questgeneratormain:memberlist/2

ERROR: [Thread pdt\_console\_client\_0\_Default Process] In:

ERROR: [Thread pdt\_console\_client\_0\_Default Process] [13] questgeneratormain:memberlist([[player|...]],[[player|...],...|...])

ERROR: [Thread pdt\_console\_client\_0\_Default Process] [12] questgeneratormain:startQuestPath([[player|...]],[],[[player|...],...|...],[],1,[start],\_12338) at c:/users/user/desktop/prolog test/testprologpdt/questgeneratormain.pl:47

ERROR: [Thread pdt\_console\_client\_0\_Default Process] [11] <user>

1. ASK: how to delete atom from list no matter the sequence?

**deleteEither**(**AR**,[**friend**,**KillerName**,**TargetName**], **AR2** )

:-

()

How to make sure that either [friend,K,T] or [friend,T,K] are deleted?