1. turn 0
   (a) Deploy: Turret and upgrade at f[3,12],[24,12],[10,10],[17,10]g; Wall atf[2,12],[2,13], [4,12],[23,12],[24,13],[25,12]g.
   (b) Delete: f[2,12],[2,13], [4,12],[23,12],[24,13],[25,12]g
2. turn 1
   (a) Deploy: Wall atf[1,13],[2,12],[3,13],[24,13],[25,12],[26,13]g,Support at[17,6], **7** scout at [20,6].
   (b) Delete: f[1,13],[2,12],[3,13],[24,13],[25,12],[26,13],[17,6]g.
3. turn 2
   (a) Deploy: Wall atf[4,11],[5,10],[6,9],[7,8],[8,7],[9,6],[10,5],[11,4],[12,3],[13,2],[14,2]g, f[15,3],[16,4],[17,5],[18,6],[19,7],[20,8]g,f[0,13],[1,13],[2,13],[26,13],[27,13]g. Interceptor atf[22,8],[23,9]g.
   (b) Delete: f[0,13],[1,13],[2,13],[26,13],[27,13],[10,10],[17,10]g.
4. turn 3
   (a) Deploy: Wall at[0,13],[1,13],[2,13],[4,13],[24,13],[25,13],[26,13],[27,13], f[4,12],[21,12],[22,12][23,12],[19,9],[19,10],[20,10]g. Turret at f[20,9],[22,11]g **2** Interceptor at [22,8].
   (b) Delete:f[0,13],[1,13],[2,13],[4,13],[24,13],[25,13],[26,13],[27,13]g, f[4,12],[21,12],[22,12][23,12],[19,9],[19,10],[20,10] g,f[20,9],[22,11]g.
5. turn 4
   (a) Deploy: Turret and upgrade at [20,9]. Turret at [22,11]. wall at f[0,13],[1,13],[2,13],[4,13],[24,13],[25,13],[26,13],[27,13]g , f[4,12],[23,12]g. **2** Interceptor at [22,8].
   (b) Delete:f[0,13],[1,13],[2,13],[4,13],[24,13],[25,13],[26,13],[27,13]g , f[4,12],[23,12]g .
6. Deploy strategy starting from turn 5
   (a) self repair 7(a) to 7(f).
   (b) 9(a) to 9(b) to determine offense or not, active defense or not.

(c) Define $S(MP_l, SP_l, H, MPo, SPo, Ho) = MP_r$. MP_l, SP_l, H are my MP left, SP left and health(defined in step 9), MPo, SPo, Ho are opponents' MP,SP and health. MP_r is the MP used for more construction, the order of construction is in 7(g).

7. Static Defense starting from turn 5

   (a) self-repair-1: make sure those walls exist and delete those with less than half life and rebuild it next turn:(equally important)
   f[4,11],[5,10],[6,9],[7,8],[8,7],[9,6],[10,5],[11,4],[12,3],[13,2],[14,2]g,
   f[15,3],[16,4],[17,5],[18,6],[19,7],[20,8]g

   (b) self-repair-2: make sure those walls exist and delete those with less than half life and rebuild it next turn:(equally important, if resources is limited, build them with un-upgraded one, if resources is still limited, build them with walls)
   Turret upgraded f[3,12],[24,12]g

   (c) self-repair-3: make sure those walls exist and delete those with less than half life and rebuild it next turn:(equally important, if resources is limited, build them with un-upgraded one, if resources is still limited, build them with walls)
   Turret upgraded f[20,9],[22,11]g

   (d) build wall and delete them:(turn 5 - 20)
   f[2,13],[3,13],[24,13],[25,13]g , f[4,12],[23,12]g.

   (e) build wall and self-repair-4:(21-50)
   f[2,13],[3,13],[24,13],[25,13]g , f[4,12],[23,12]g.

   (f) build wall upgraded and self-repair-4:(51-100)
   f[2,13],[3,13],[24,13],[25,13]g , f[4,12],[23,12]g.

   (g) build and self-repair-5 if we have extra resources:(turn 5-100) the following is in order
   wall f[19,11],[20,11]g
   Turret [20,10]
   Turret [19,10]
   Turret upgrade [20,10]
   Turret upgrade [19,10]
   wall upgrade f[19,11],[20,11]g
   Turret [22,12]

Turret update[22,12]
Wall f[4,13],[5,13],[6,13],[17,12],[18,12],[19,12],[17,11],[18,11]g
Wall upgrade f[4,13],[5,13],[6,13],[17,12],[18,12],[19,12],[17,11],[18,11]g

8. Active Defense from turn 5

   (a) (left)
   if the Opponent's Mobile points is like: $H_o < 15$ or **if** f[1,14],[2,14]g or f[1,14],[1,15]g are not empty or deleted
   build wall and delete them:
   f[0,13],[1,13]g.
   if the Opponent's Mobile points is like:15
   $H_o < 25$ and if f[1,14],[2,14]g or f[1,14],[1,15]g are empty or deleted.
   build wall and delete them:
   f[1,13]g.
   build wall upgraded and delete them:
   f[0,13]g.
   if the Opponent's Mobile points is like:25 $H_o < 35$ and if f[1,14],[2,14]g or f[1,14],[1,15]g are empty or deleted.
   build wall and delete them:
   f[1,13]g.
   build wall upgraded and delete them:
   f[0,13]g
   build Turret and delete them:
   f[1,12]g.
   if the Opponent's Mobile points is like: 35 $H_o < 45$and if f[1,14],[2,14]g or f[1,14],[1,15]g are empty or deleted.
   build wall and delete them:
   f[1,13]g.
   build wall upgraded and delete them:
   f[0,13]g
   build updated Turret and delete them:
   f[1,12]g.
   if the Opponent's Mobile points is like: 45 H_o and if f[1,14],[2,14]g or f[1,14],[1,15]g are empty or deleted.
   build wall and delete them:
   f[1,13]g.

build wall upgraded and delete them:
f[0,13]g
build updated Turret and delete them:
f[1,12],[2,12]g.

(b) (right)
if the Opponent's Mobile points is like: $H_o < 15$ or **if** f[26,14],[2,15]g or f[26,14],[25,15]g are not empty or deleted
build wall and delete them:(right)
f[26,13],[27,13]g.
if the Opponent's Mobile pointsis like: 15 $H_o < 25$ and if f[26,14],[2,15]g or f[26,14],[25,15]g are empty or deleted.
build wall and delete them:
f[26,13]g.
build wall upgraded and delete them:
f[27,13]g.
if the Opponent's Mobile pointsis like: 25 $H_o < 35$ and if f[26,14],[2,15]g or f[26,14],[25,15]g are empty or deleted.
build wall and delete them:
f[26,13]g.
build wall upgraded and delete them:
f[27,13]g.
build Turret and delete them:
f[26,12]g.
if the Opponent's Mobile points is like: 35 $H_o < 45$and if f[26,14],[2,15]g or f[26,14],[25,15]g are empty or deleted.
build wall and delete them:
f[26,13]g.
build wall upgraded and delete them:
f[27,13]g.
build Turret upgraded and delete them:
f[26,12]g.
if the Opponent's Mobile points is like: 45 H_o and if f[26,14],[2,15]g or f[26,14],[25,15]g are empty or deleted.
build wall and delete them:
f[26,13]g.
build wall upgraded and delete them:
f[27,13]g.

build Turret upgraded and delete them:
f[26,12],[27,12]g.

9. Offense

   (a) define x = total number of upgraded Turret in f[1,15],[2,15]g, y = total number of upgraded Turret in f[1,14],[2,14] [3,14]g, z = total number of Turret(not upgraded) in f[1,15],[2,15],[1,14],[2,14] [3,14]g.w is the status of [0,14].(w=0 represents empty grid, w=1 represents wall, $w = 2$ represents upgraded wall).

   define $\bar{x}$ = total number of upgraded Turret in f[25,15],[26,15]g, $\bar{y}$ = total number of upgraded Turret in f[24,14],[25,14],[26,14]g, $\bar{z}$ = total number of Turret(not upgraded) in f[25,15],[26,15],[24,14],[25,14] [26,14]g. $\bar{w}$ is the status of [27,14].($\bar{w}$=0 represents empty grid, $\bar{w}$=1 represents wall, $\bar{w} = 2$ represents upgraded wall).

   MP is my mobile points, SP is my structure points. Define $O(x, y, z, \bar{x}, \bar{y}, \bar{z}, w, \bar{w}, MP, SP, H, R) = (a, b, c, d, e, f, MP_l, SP_l)$, where a is the first round scout needed, b is the second round scout needed, c is the support needed, d is the Demolisher needed,e is the Interceptor needed. f controls the position of scout. MP_l is the MP left after deploy offense or active defese. SP_l is the SP left after deploy offense or active defese. H is my health. R is the number of turn.

   (b) If $d \neq 0$ or $e \neq 0$, put Demolisher at [15,1] and Interceptor at [19,5]. If $c \neq 0$, put support in f[13,3],[14,3],[15,4],[16,5],[17,6],[18,7],[14,4],[15,5],[16,6],[17,7]g orderly.

   (c) If $f = 0$, keep both left and right active defense. If $f = 1$, put a number of scouts at [11,2] and b number of scouts at [10,3] and Stop the right active defense(defined in 8(b)) for 1 turn,keep the left active defense. If $a \neq 0$ or $b \neq 0$ and $f = 2$, put a number of scouts at[19,5] and b number of scouts at [20,6] and Stop the left active defense(defined in 8(a)) for 1 turn,keep the right active defense.