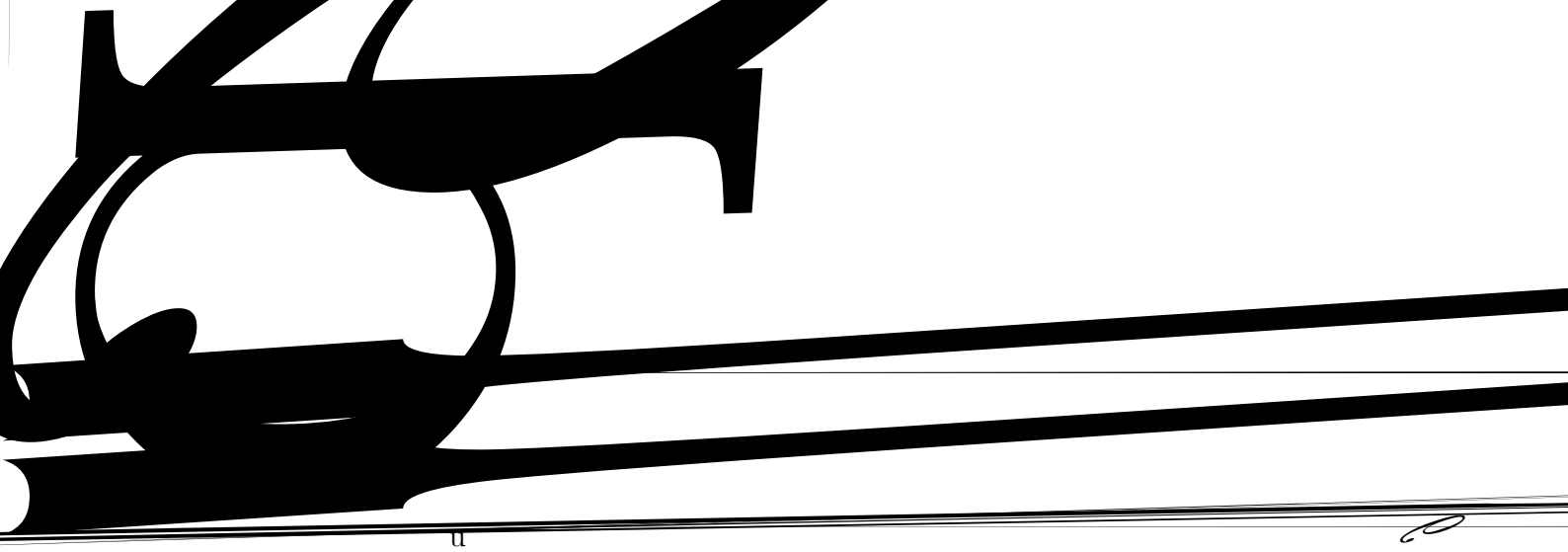
1. turn 0
   (a) Deploy: Turret and upgrade at {[3,12],[24,12],[10,10],[17,10]}; Wall at{[2,12],[2,13], [4,12],[23,12],[24,13],[25,12]}.
   (b) Delete: {[2,12],[2,13], [4,12],[23,12],[24,13],[25,12]}
2. turn 1
   (a) Deploy: Wall at{[1,13],[2,12],[3,13],[24,13],[25,12],[26,13]},Support at[17,6], **7** scout at [20,6].
   (b) Delete: {[1,13],[2,12],[3,13],[24,13],[25,12],[26,13],[17,6]}.
3. turn 2
   (a) Deploy: Wall at{[4,11],[5,10],[6,9],[7,8],[8,7],[9,6],[10,5],[11,4],[12,3],[13,2],[14,2]}, {[15,3],[16,4],[17,5],[18,6],[19,7],[20,8]},{[0,13],[1,13],[2,13],[26,13],[27,13]}. Interceptor at{[22,8],[23,9]}.
   (b) Delete: {[0,13],[1,13],[2,13],[26,13],[27,13],[10,10],[17,10]}.
4. turn 3
   (a) Deploy: Wall at[0,13],[1,13],[2,13],[4,13],[24,13],[25,13],[26,13],[27,13], {[4,12],[21,12],[22,12][23,12],[19,9],[19,10],[20,10]}. Turret at {[20,9],[22,11]} **2** Interceptor at [22,8].
   (b) Delete:{[0,13],[1,13],[2,13],[4,13],[24,13],[25,13],[26,13],[27,13]}, {[4,12],[21,12],[22,12][23,12],[19,9],[19,10],[20,10] },{[20,9],[22,11]}.
5. turn 4
   (a) Deploy: Turret and upgrade at [20,9]. Turret at [22,11]. wall at {[0,13],[1,13],[2,13],[4,13],[24,13],[25,13],[26,13],[27,13]} , {[4,12],[23,12]}. **2** Interceptor at [22,8].
   (b) Delete:{[0,13],[1,13],[2,13],[4,13],[24,13],[25,13],[26,13],[27,13]} , {[4,12],[23,12]} .
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 (equally important) {[4,11],[5,10],[6,9],[7,8] [ ,[12,3],[13,2],[14,2]}, {[15,3],[16,4],[17,5] ,7],[20,8]}

   (b) self-repair sure those walls exi and delete those with less t ife and rebuild it next n:(equally important, if limited, build them with upgrad



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

8. Active Defense from turn 5

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

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

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

build Turret upgraded and delete them:
{[26,12],[27,12]}.

9. Offense

   (a) define $x$ = total number of upgraded Turret in {[1,15],[2,15]}, $y$ = total number of upgraded Turret in {[1,14],[2,14] [3,14]}, $z$ = total number of Turret(not upgraded) in {[1,15],[2,15],[1,14],[2,14] [3,14]}.$w$ 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 {[25,15],[26,15]}, $\bar{y}$ = total number of upgraded Turret in {[24,14],[25,14],[26,14]}, $\bar{z}$ = total number of Turret(not upgraded) in {[25,15],[26,15],[24,14],[25,14] [26,14]}. $\bar{w}$ is the status of [27,14].($\bar{w}$=0 represents empty grid, $\bar{w}$=1 represents wall, $\bar{w} = 2$ represents upgraded wall).

   $m$ is whether the total number of walls and Turrets in rectangle greater than 14, the four vertexes are {[7,12],[20,12],[7,9],[20,9]}. $m = 1$, if it's above 14, $m = 0$ otherwise.

   MP is my mobile points, SP is my structure points. Define $O(x, y, z, \bar{x}, \bar{y}, \bar{z}, w, m, \bar{w}, MP, SP, H, R) = (a, b, c, d, e, f, h, MP_l, SP_l)$, 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 {[13,3],[14,3],[15,4],[16,5],[17,6],[18,7],[14,4],[15,5],[16,6],[17,7]} orderly. If $h \geq 0$, put $h$ number of scouts at [15,1].

   (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.