

# Plus Codes (fors stedet Merlion, Singapore)

Taleksemplet er hentet på Wikipedia: [https://en.wikipedia.org/wiki/Open\\_Location\\_Code#Example](https://en.wikipedia.org/wiki/Open_Location_Code#Example)

Metoden til at beregne Open Location Code (PlusCode):

[https://github.com/google/open-location-code/blob/master/docs/olc\\_definition.adoc#open-location-code-specification](https://github.com/google/open-location-code/blob/master/docs/olc_definition.adoc#open-location-code-specification)

*restart*

*with(StringTools) :*

*with(ListTools) :*

OLC	2	3	4	5	6	7	8	9	C	F	G	H	J	M	P	Q	R	V	W	X
Decimal	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

$OLC := [2, 3, 4, 5, 6, 7, 8, 9, C, F, G, H, J, M, P, Q, R, V, W, X] :$

Der anvendes tal med base 20!

**Koordinaterne for stedet:**

Bredde:  $B := 1.286785 :$

Længde:  $L := 103.854503 :$

**Beregning på bredde-koordinaten:**

$CB := [0, 0, 0, 0, 0] :$

$B := B + 90 = 91.286785$

$X := \frac{B}{20} :$

$CB[1] := \text{floor}(X) :$

**for  $i$  from 2 to 5 do**

$X := (X - CB[i - 1]) \cdot 20;$

$CB[i] := \text{floor}(X) :$

**end do:**

Der skiftes fra 0 til 19 med ovenstående liste:

**for  $i$  from 1 to 5 do  $CB[i] := OLC[CB[i] + 1]$  end do:**

$CB = [6, H, 7, P, P]$

$CB := \text{convert} \sim (CB, \text{string}) = ["6", "H", "7", "P", "P"]$

**Beregning på længde-koordinaten:**

$CL := [0, 0, 0, 0, 0] :$

$L := L + 180 = 283.854503$

$X := \frac{L}{20} :$

$CL[1] := \text{floor}(X) :$

**for  $i$  from 2 to 5 do**

$X := (X - CL[i - 1]) \cdot 20;$

$CL[i] := \text{floor}(X) :$

**end do:**

Der skiftes fra 0 til 19 med ovenstående liste:

**for  $i$  from 1 to 5 do**  $CL[i] := OLC[CL[i] + 1]$  **end do:**

$CL = [P, 5, V, 3, R]$

$CL := \text{convert}\sim(CL, \text{string}) = ["P", "5", "V", "3", "R"]$

PlusCode sammensættes nu ved fletning af de første 4 tegn:

$PC := \text{Interleave}(CB[1..4], CL[1..4]) = ["6", "P", "H", "5", "7", "V", "P", "3"]$

Der indsættes et plus-tegn inden de 2 sidste tegn flettes:

$PC := [\text{op}(PC), "+", CB[5], CL[5]] = ["6", "P", "H", "5", "7", "V", "P", "3", "+", "P", "R"]$

$\text{PlusCode} := \text{CaseJoin}(PC) = "6PH57VP3+PR"$

**Se stedet på kort:**

<https://plus.codes/6PH57VP3+PR>