190549

Question 1)

```
minpt f x y = if x > y
                then
                  error "Invalid range"
            else snd (minimum (zip (map f [x .. y]) [x .. y]))
```

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	Rough
0-2	HAND → True
This seems to be related to but (1)	1) 2042
	join → opposite
1) xs = 42:xs	ys → infine
ys = [1]	xs → 426
check A xs ys is stuck (,	
check B xs ys gives False,	
oR	
checkA A → diverges at rutine,	
if	

Q-1

minpt f x y = if $\begin{cases} \text{Rows } h \\ \text{if } \leq n \cdots \text{poln} \\ \text{not}(f \leq b (n-1) \\ \text{and } Bon (n-1) \\ \text{are Pred } (feel(n)) \end{cases}$

Q-3:

(a) We are using bea in polar & vice-versa.
(from Lec): Their is no-concept of named
functions, so no-way to refer "recursively".

(b) we can write above for λ-expression
by introducing not function & then Y
combinator

polar = $\lambda n.$ if (isZero n) True (bea (pred n))

polar = $(\lambda f n.$ if (isZero n) True (not $f(n-1)$)) polar
$\qquad\qquad\qquad\qquad\qquad\qquad\qquad$ (pred n))

polar = $g,$ polar

polar = $Y, g,$ (polar is fixed pt.)

Similarly:

bear = $(\lambda f n.$ if (isZero n) False (not $f(n-1)$)) bear

bear = $Y, g,$

bear = $\lambda f n.$ if (isZero n) False (not $f(pred n)$) bear

bear = $g,$ bear

bear = Y, g_2