Algorithm Analysis: partial prod 32 Informal Proof Goal is to prove that at the beginning of each loop invariant: ci + 2 as[k]·Bh = 5 (bs[k]·d+as'[k])·Bh, where B= 232 Basis: Belfore the first iteration where i=0, c is also O, which clearly satisfies the above equation. Inductive Hypothesis: Assume C+ Spas[k]-Bh = & (65[k] od +as'[k]) B.R Industive Step: Goal is to show that after an iteration , this invariant will remain the same as at the top of the loop. = E(bs[k] od+as'[k]) -Bk + sum -Bir Toolding sum = Z. (65[k].dtas [k]) Bh+ (65[k].d+as [A+C).Bc [substituting som = \(\( \left( \begin{aligned} \left( \begin{aligned} \left( \begin{aligned} \left( \begin{aligned} \begin{aligned} \left( \begin{aligned} \begin{aligned} \begin{aligned} \left( \begin{aligned} \begin{aligne = \( \langle \( \begin{align\*} \langle \text{d} + \text{as}[i] \rangle \( \text{R}^k + \text{C-B}^i \) [Consolidated summations] \( \text{k} < i+1 \) = Z. as[k]·Bk + (bs[i] od + as [i]) ci [Inductive Hypothesis Substitution sum = (sum 7732). B + (uint 32 +) sum because sum>732=sum/B, and (vint32-t) sum=sling/o B. So, Z (bs[k]-d+as[k]) Bk+ (sum >732-B+(uin+32-1)sum)-bi [substitute Gern] Since c=sum>732, and as[i] = (vint32-t) sum E (65[k]-d+as'[k])Bk+(c.B+as[i])Bi (substitutions = Zás[k]·Bk+C·Bi+1+as[i]Bi IH substitution and distribution

indi-ree	The supple of th
	= Stas[k].Bk+C.Bi+1 [Merge summedions]
part pr 10	k <i+< th=""></i+<>
	Then, once i increments, the top of the box will then be:
1	= >1 as[b]-Rk + c. 2;
1	$= \sum_{k \in i} as[k] - B^k + c \cdot B^i$
7	This proves that this expression is invariant for each loop iteration.
1	This that the expression is invariant for each loop iteration.
+	
$\dashv$	
+	
+	
-	
-	
$\dashv$	
_	
	The second process of the control of
	**************************************
4	What is produced the control of the
	They discussed the Special Control of the Spe
	"Miller responsible for the processing and the proc
	Extra glacer places of specific and the second place of the second

The state of the s

g 200 H H H H H H