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// This is my work
// Broc Burger
// CS366

Original Trace
for each row r = Monday, Tuesday, Wednesday
 for each column c = Sandy then Squidward
  for each index k = 1, 2, 3
   product[r,c] += usage[r,k] x costs[k,c]

product[Monday][Sandy] += 8*1.99        //k=1
product[Monday][Sandy] += 1*2.99          //k=2
product[Monday][Sandy] += 10*0.50       //k=3
product[Monday][Squidward] += 8*1.50        //k=1
product[Monday][Squidward] += 1*4.50        //k=2
product[Monday][Squidward] += 10*0.60       //k=3

product[Tuesday][Sandy] += 2*1.99            //k=1
product[Tuesday][Sandy] += 9*2.99            //k=2
product[Tuesday][Sandy] += 6*0.50            //k=3
product[Tuesday][Squidward] += 2*1.50        //k=1
product[Tuesday][Squidward] += 9*4.50        //k=2
product[Tuesday][Squidward] += 6*0.60        //k=3

product[Wednesday][Sandy] += 3*1.99            //k=1
product[Wednesday][Sandy] += 4*2.99            //k=2
product[Wednesday][Sandy] += 3*0.50            //k=3
product[Wednesday][Squidward] += 3*1.50        //k=1
product[Wednesday][Squidward] += 4*4.50        //k=2
product[Wednesday][Squidward] += 3*0.60        //k=3

Patrick Trace
for each column c = Sandy then Squidward
 for each row r = Monday, Tuesday, Wednesday
  for each index k = 1, 2, 3
   product[c,r] += usage[r,k] x costs[k,c]

product[Sandy][Monday] += 1.99*8            //k=1
product[Sandy][Monday] += 2.99*1            //k=2
product[Sandy][Monday] += .50*10            //k=3
product[Squidward][Monday] += 1.50*8        //k=1
product[Squidward][Monday] += 4.50*1        //k=2
product[Squidward][Monday] += .60*10        //k=3

product[Sandy][Tuesday] += 1.99*1            //k=1
product[Sandy][Tuesday] += 2.99*9            //k=2
product[Sandy][Tuesday] += .50*6             //k=3
product[Squidward][Tuesday] += 1.50*1        //k=1
product[Squidward][Tuesday] += 4.50*9        //k=2
product[Squidward][Tuesday] += .60*6         //k=3

product[Sandy][Wednesday] += 1.99*3            //k=1
product[Sandy][Wednesday] += 2.99*4            //k=2
product[Sandy][Wednesday] += .50*3             //k=3
product[Squidward][Wednesday] += 1.50*3        //k=1
product[Squidward][Wednesday] += 4.50*4        //k=2
product[Squidward][Wednesday] += .60*3         //k=3

SpongeBob Trace
for each row r = Monday, Tuesday, Wednesday
 for each index k = 1,2,3
  for each column c = Sandy, Squidward
   product[r,k] += usage[r,k] x costs[k,c]

product[Monday][1] += 8*1            //c=Sandy
product[Monday][2] += 1*2            //c=Sandy
product[Monday][3] += 10*3           //c=Sandy
product[Monday][1] += 8*1        //c=Squidward
product[Monday][2] += 1*2        //c=Squidward
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product[Monday][3] += 10*3       //c=Squidward

product[Tuesday][1] += 2*1             //c=Sandy
product[Tuesday][2] += 9*2             //c=Sandy
product[Tuesday][3] += 6*3             //c=Sandy
product[Tuesday][1] += 2*1         //c=Squidward
product[Tuesday][2] += 9*2         //c=Squidward
product[Tuesday][3] += 6*3         //c=Squidward

product[Wednesday][1] += 3*1             //c=Sandy
product[Wednesday][2] += 4*2             //c=Sandy
product[Wednesday][3] += 3*3             //c=Sandy
product[Wednesday][1] += 3*1         //c=Squidward
product[Wednesday][2] += 4*2         //c=Squidward
product[Wednesday][3] += 3*3         //c=Squidward

Looking at each algorithm I only understood the original and patricks trace, so
I believe the original is the best opiton.

Mr. Crabs should order from Squidward on Monday because Squidwards product is $2
2.50 and Sandys is $23.91
On Tuesday He should order from Sandy because her product is $33.89 and Squidwar
ds is $47.10.
On Wednesday He should order from Sandy becasue her product is $19.43 and Squidw
ards is $24.30
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