

## MATRIX CHAIN MULTIPLICATION

Algorithm MatrixChain(P, n)

```
{
    for i:= 1 to n do
        m[i, i] := 0;
    for l := 2 to n do
    {
        for i := 1 to (n - l + 1) do
        {
            j := i + l - 1;
            m[i, j] := infinity;
            for k := i to j-1 do
            {
                q := m[i, k] + m[k+1, j] + (p[i-1]*p[k]*p[j]);
                if(q < m[i, j]) then
                    m[i, j] := q;
            }
        }
    }
    return(m[1, n-1]);
}
```