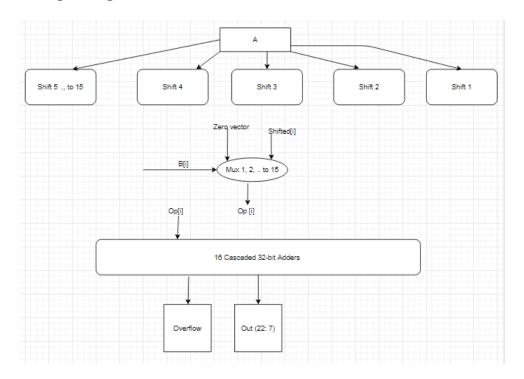
Multiplication

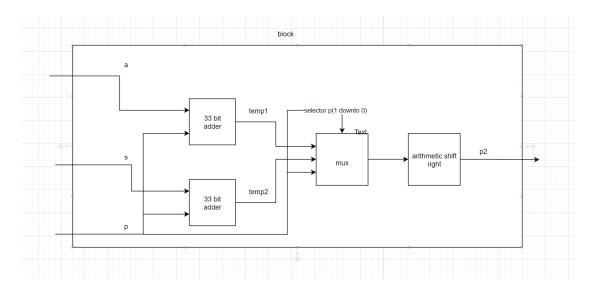
1-Add and Shift:-

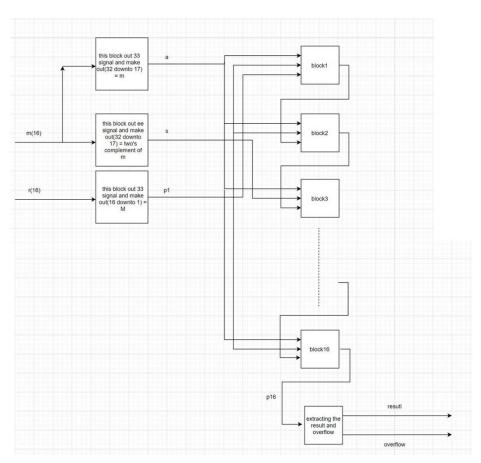
Implemented as a combinational circuit, according to the following design:-



2- Booth:

Also a combinational circuit, according to the following design:-





Comparison between the two algorithms in power, area and time:

| | | | Timing | |
|---------------|-------------|------|-----------------|---------|
| | Power | Area | Arrival time | Slack |
| Add and shift | 5457.830566 | 2029 | 14224 | 27776 |
| booth | 8304.995117 | 3087 | 6148.3 | 35851.7 |