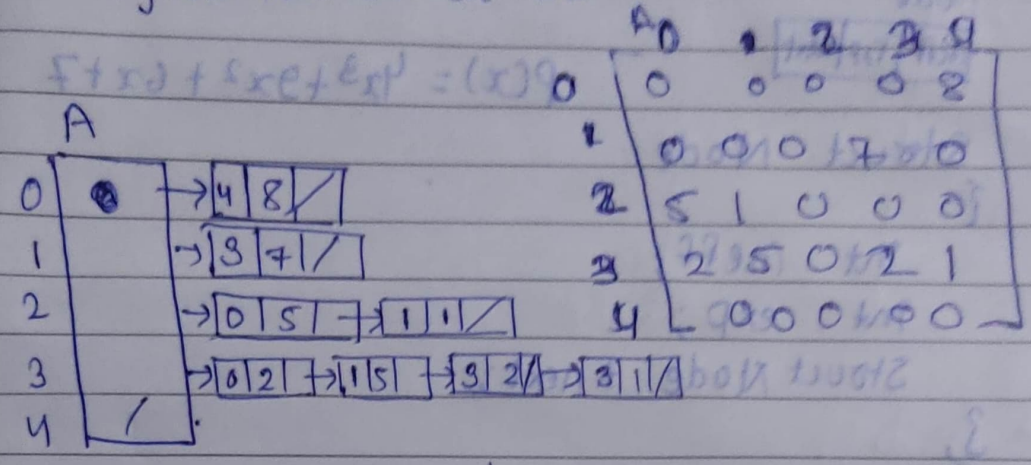
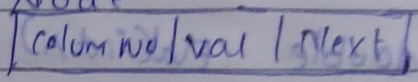
* Sparse Matrix in linked list

↓

very few Non zero element



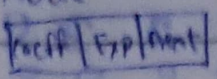

```
Struct Node {
   int col;
   int val;
   struct Node *next;
};

Node *A[m];
A[0] = new Node;
```

- To Display a sparse matrix

```
for (i=0 ; i<m ; i++)
{
    P=A[i];
   for (j=0; j<n ; j++)
   {
      if (j==p->col)
      {    printf("%d", p->val);
           p=p->next;
      }
      else printf("0");}}
```

* Polynomial Representation using Linked list

Node




$p(x) = 4x^3 + 9x^2 + 6x + 7$

```
Struct Node
{
   int coeff;
   int exp;
   Struct Node *next;
};

double Eval(int x)
{
   double sum = 0.0
   Node *q = p
   while (q != Null)
   {
      Sum += q->coeff * pow (x, q->exp);
      q = q->next
   }
}
```