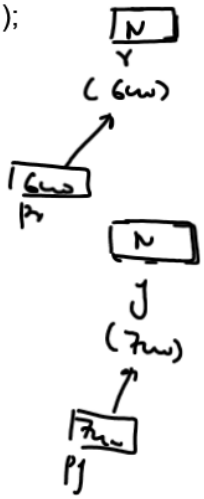
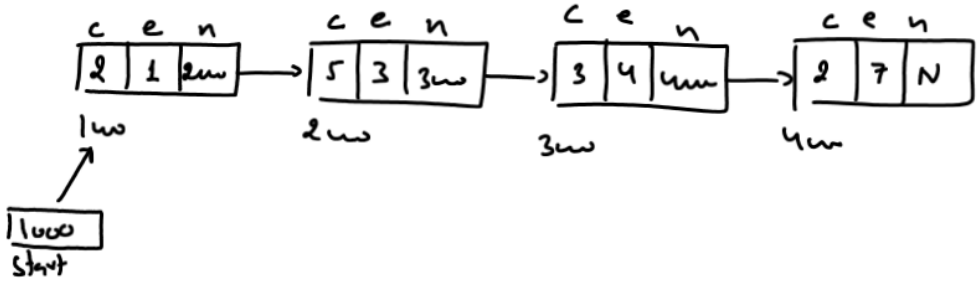
```
int dequeue(struct Queue **pf,struct Queue **pr)
{
    struct Queue *p;
    int x;
    if(*pf==NULL)
    {
        printf("Empty Queue");
        return -1;
    }
   p=*pf;
   x=p->data;
   if(*pf==*pr)
         *pf=*pr=NULL;
   else
         *pf =(*pf)->next;
  free(p);
  return x;
}
```



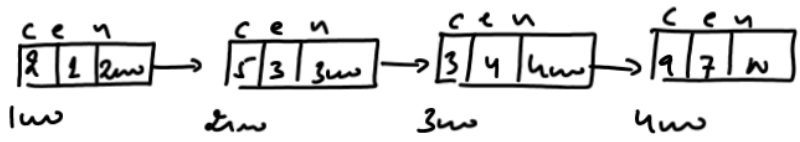
Addition of Polynomial

Representing a Polynomial Using Linked list

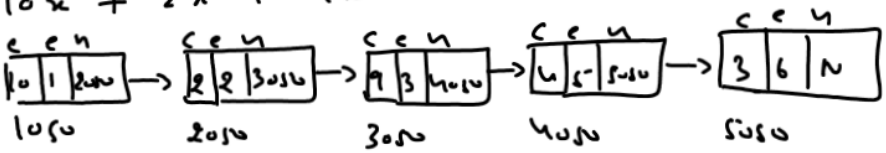
$2x + 5x^3 + 3x^4 + 2x^7$



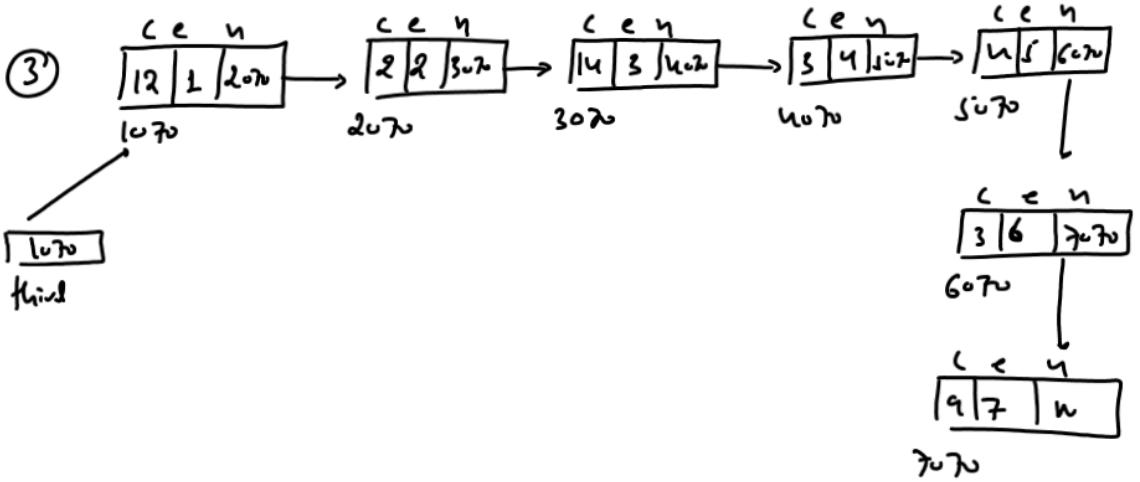
① $2x + 5x^3 + 3x^4 + 9x^7$



② $10x + 2x^2 + 9x^3 + 4x^5 + 3x^6$



③



```
struct poly
{
   int coeff;
   int exp;
   struct poly *next;
};
void append(struct poly**,int,int);
void display(struct poly*);
void add(struct poly *,struct poly *,struct poly **);
int main()
{
   struct poly *first,*sec,*third;
   first=sec=third=NULL;
   append(&first,2,1);
   append(&first,5,3);
   ....
   append(&sec,10,1);
   append(&sec,2,2);
   .....
   add(first,sec,&third);
   display(first);
   display(sec);
   display(third);
   return 0;
}
```

```
  void add(struct poly *f,struct poly *s,struct poly **pt)
  {
     struct poly *p,*temp;
    if(f==NULL && s==NULL)
      {
        printf("Addition not possible");
        return;
     }
     while(f!=NULL && s!=NULL)
     {
         p=(struct poly *)malloc(sizeof(struct poly));
         p->next=NULL;
         if(*pt==NULL)
               *pt=p;
         else
              temp->next=p;
         temp=p;
         // continue further code
     }
```