

## ADDITION OF POLYNOMIALS

```

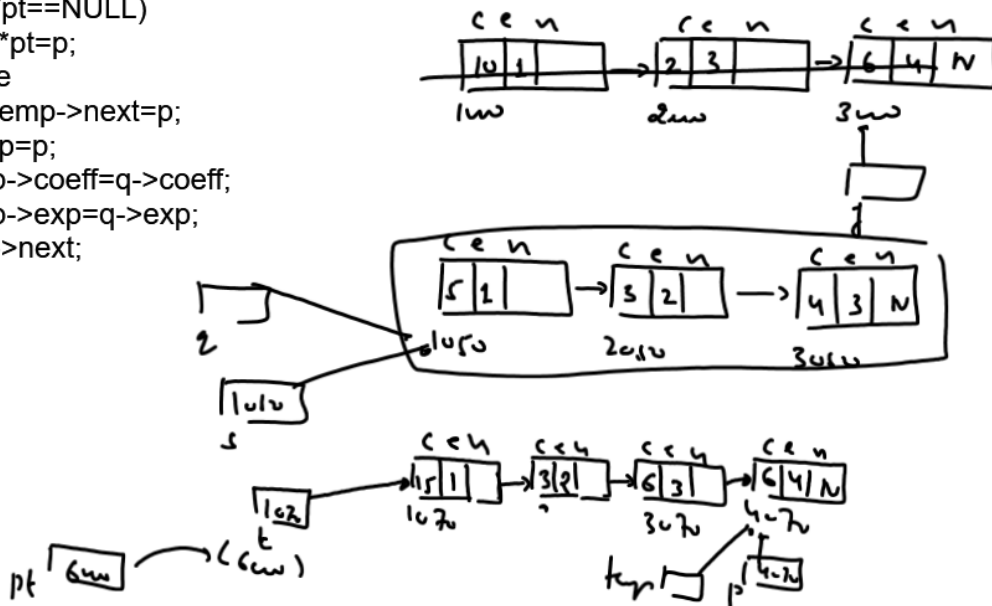
void add(struct poly *f, struct poly *s, struct poly **pt)
{
    struct poly *p, *temp, *q;
    if(f==NULL && s==NULL)
    {
        printf("Addition not possible");
        return;
    }
    while(f!=NULL && s!=NULL)
    {
        p=(struct poly *)malloc(sizeof(struct poly));
        p->next=NULL;
        if(*pt==NULL)
            *pt=p;
        else
            temp->next=p;
        temp=p;
        if(f->exp < s->exp)
        {
            temp->coeff=f->coeff;
            temp->exp=f->exp;
            f=f->next;
        }
        else if(s->exp < f->exp)
        {
            temp->coeff=s->coeff;
            temp->exp=s->exp;
            s=s->next;
        }
        else
        {
            temp->coeff=f->coeff+s->coeff;
            temp->exp=f->exp;
            s=s->next;
            f=f->next;
        }
    }
    if(f!=NULL)
        q=f;
    else
        q=s;
}

```

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while(q!=NULL)
{
    p=(struct poly *)malloc(sizeof(struct poly));
    p->next=NULL;
    if(*pt==NULL)
        *pt=p;
    else
        temp->next=p;
    temp=p;
    temp->coeff=q->coeff;
    temp->exp=q->exp;
    q=q->next;
}

```

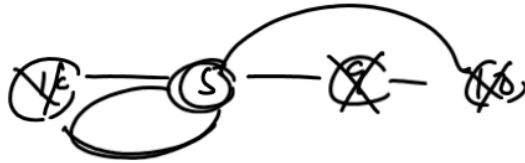


## ASSIGNMENTS:

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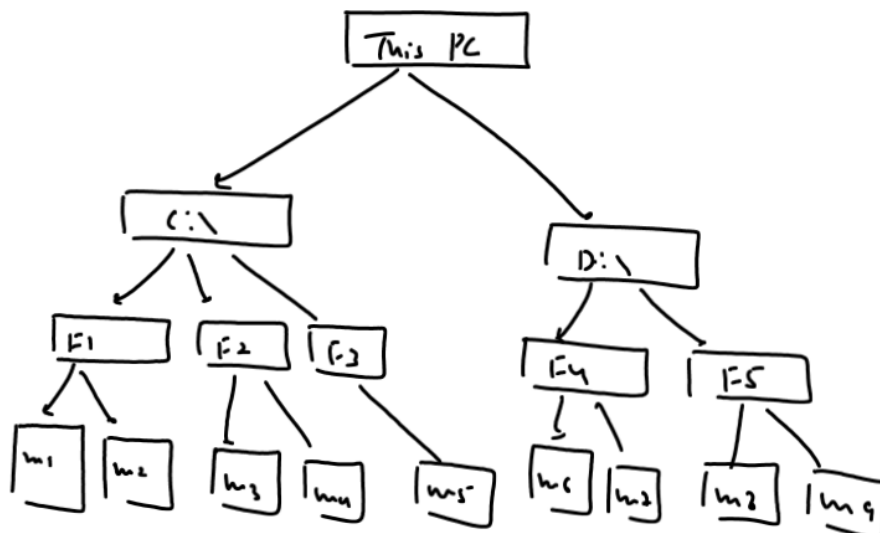
Qn1. Modify the previous function add() of polynomial problem so that while adding new node add() calls append().

Qn2. Write down code to implement JOSEPHUS PROBLEM



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## Non Linear Data Structure



## Types of Non Linear Data Structure

