# REPRESENTATION OF POLYNOMIAL USING ARRAY

## PROGRAM

```
#include<stdio.h>
void main()
{
int limit,i,j;
printf("enter the no of elements in the polynomial\n");
scanf("%d",&limit);
struct poly{
int coef,exp;
}p[20];
printf("enter the polynomial\n");
for(i=0;i<limit;i++){
printf("enter the next coeficcient\n");
scanf("%d",&p[i].coef);
printf("enter the  next exponent\n");
scanf("%d",&p[i].exp);
}
printf("the polynomial is:\n");
for(i=0;i<limit;i++){
printf("%dx^%d ",p[i].coef,p[i].exp);
if(i<limit-1)
printf("+ ");
}
}
```

**OUTPUT**

```
csea1@sjcet-H81M-DS2:~/anush$ gcc poly.c
csea1@sjcet-H81M-DS2:~/anush$ ./a.out
enter the no of elements in the polynomial
3
enter the polynomial
enter the next coeficcient
3
enter the  next exponent
2
enter the next coeficcient
5
enter the  next exponent
1
enter the next coeficcient
8
enter the  next exponent
0
the polynomial is:
3x^2 + 5x^1 + 8x^0 csea1@sjcet-H81M-DS2:~/anush$
```