

Program-2

(Lab-2, 12-08-2020)

Task: Write a program to calculate power of given number using recursion.

Source Code:

```
//Calculate Power using Recursion
```

```
#include<stdio.h>
```

```
long int pow(int,int);
```

```
int main()
```

```
{
```

```
    int b,e;
```

```
    printf("Enter base:");
```

```
    scanf("%d",&b);
```

```
    printf("Enter exponent:");
```

```
    scanf("%d",&e);
```

```
    printf("%ld", pow(b,e));
```

```
}
```

```
long int pow(int b, int e)
```

```
{
```

```
    if(e==1)
```

```
    {
```

```
        return b;
```

```
    }
```

```
    else
```

```
    {
```

```
        e=e-1;
```

```
        b=b*pow(b,e);
```

```
    }
```

```
}
```

Output:

```
Enter base:3
Enter exponent:3
27
-----
Process exited after 6.249 seconds with return value 0
Press any key to continue . . .
```

Program-3

(Lab-2, 12-08-2020)

Task: Write a program find largest element in given array

Source Code:

//Find largest element in the array having atleast 5 elements

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
    int size,i,a[100],max;
```

```
    printf("Enter size of array:");
```

```
    scanf("%d", &size);
```

```
    printf("\nEnter %d elements:",size);
```

```
    for(i=0;i<size;i++)
```

```
    {
```

```
        scanf("%d", &a[i]);
```

```
    }
```

```
    max=a[0];
```

```
    for(i=0;i<size;i++)
```

```
    {
```

```
        if(a[i]>max)
```

```
        {
```

```
            max=a[i];
```

```
        }
```

```
    }
```

```
        printf("Largest element is: %d", max);  
    }
```

Output:

```
Enter size of array:6  
  
Enter 6 elements:1 2 3 4 5 6  
Largest element is: 6  
-----  
Process exited after 6.093 seconds with return value 0  
Press any key to continue . . .
```