PROGRAM 2

SOURCE CODE

```
def fn(n):
    if n == 1:
        return 0
    elif n == 2:
        return 1
    else:
        return fn(n-1) + fn(n-2)
num = int(input("enter a number: "))
if num > 0:
    print("fn(",num,") = ",fn(num),sep ="")
else:
    print("error in input")
```

OUTPUT

```
Enter a number : 6
fn(6) = 5

Enter a number : asc
Try with numeric value

Enter a number : -3
Input should be greater than 0
```

SOURCE CODE

```
def BinToDec(b):
    return int(b,2)
def OctToHex(o):
    return hex(int(o,8))
bnum = input("enter the binary number: ")
dnum = BinToDec(bnum)
print("\nEquivalent Decimal value = ",dnum)

onum = input("enter the octal number: ")
hnum = OctToHex(onum)
print("\nEquivalent Hexadecimal value = ",hnum[2:].upper())
```

OUTPUT

```
Enter the binary number : 1010
Equivalent Decimal value = 10

Enter the octal number : 73
Equivalent hexadecimal value = 3B
```