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Project 1

Part A

CS 3130

Professor Galina

Code:

```
def main():
```

```
    userNum = -1    #Initilaize user input variable and set it to -1
```

```
    while userNum < 0:    #Verification loop to make sure user inputs a valid number
```

```
        userNum = int(input("Enter a positive number: "))
```

```
        if userNum < 0:
```

```
            print("Invalid number")
```

```
    print(fib(userNum))    #Run code
```

```
def fib(userNum):
```

```
    if userNum == 0:    #First fib number is 0
```

```
        return 0
```

```
    elif userNum == 1:    #Second fib number is 1
```

```
        return 1
```

```
    elif userNum == 2:    #Third fib number is 1
```

```
        return 1
```

```
    else:
```

```
        return(fib(userNum - 1) + fib(userNum - 2))    #Fib equation with recursion
```

main()

Execution:

```
esswe@LAPTOP-31SK84E0: /mnt/c:/users/esswe/Documents/Coding/algorithms/project1$ python3 ESSJ1A.py
Enter a positive number: 12
144
```