Exercises 4: if statement

Exercise 1: write a python program that accepts a number from input and print the grade in letter

Accepted grade is between 0 and 100

if grade>90 so print grade A

if grade>80 so print grade B

if grade>70 so print grade C

if grade>60 so print grade D

else F

 # First method

```python
nb = int(input("Enter your grade"))
if nb<0:
    print("Grade is not accepted")
elif nb < 60:
    print("Grade is F")
elif nb<70:
    print("Grade is D")
elif nb<80:
    print("Grade is C")
elif nb<90:
    print("Grade is B")
elif nb<=100:
    print("Grade is A")
else:
    print("your grade is not accepted")
```

Second method

```python
nb = int(input("Enter your grade"))


if nb>100:
    print("Grade not accepted")
elif nb>=90:
    print("Grade is A")
elif nb>=80:
    print("Grade is B")
elif nb>=70:
    print("Grade is C")
elif nb>=60:
    print("Grade is D")
elif nb>=0:
    print("Grade is F")
else:
    print("Grade cannot be negative")
```

Third method

```python
grade = input("Enter your grade ")
grade= int(grade)


if grade>=0 and grade<=100:
    if grade>=90:
        print("A")
    elif grade>=80:
        print("B")
```

```python
        elif grade>=70:
            print("C")
        elif grade>=60:
            print("D")
        else:
            print("F")
else:
    print("Grade is not accepted")
```

Fourth method (not preferable)

```python
nb = int(input("Enter your grade"))
if nb>=0 and nb<60:
    print("F")
if nb>=60 and nb<70:
    print("D")
if nb>=70 and nb<80:
    print("C")
if nb>=80 and nb<90:
    print("B")
if nb>=90 and nb<=100:
    print("A")
if nb>100 or nb < 0
    print("not accepted")
```

Exercise 2: Write a python code that calculate the body mass index BMI

Rule of BMI = weight (in kg) / height * height (in meter)

For example BMI = 80 kg / 1.75 m * 1.75 m = 26.6

The program should accepts from input the weight in kg and the height in cm

<u>Conditions and print answers:</u>

BMI<=16   --- too underweight

BMI<=18.5 --- underweight

BMI<=25   --- Healthy

BMI<=30   --- overweight

BMI>30   --- too overweight

```python
w, h = input("Enter weight in kg and height in cm").split()
w = float(w)
h = float(h)/100

BMI = w/pow(h,2)

if BMI <=16:
    print("too underweight")
elif BMI<=18.5:
    print("underweight")
elif BMI<=25:
    print("healthy")
elif BMI<=30:
    print("Overweight")
else:
    print("too overweight")
```