1. Task1

print("Hello World \n")

Output:

```
 -u "c:\TBC\Sem2\Principl
ical6\helloworld.py"
Hello World
```

2. Monthly Expenditure A:

```
#Practical 6 part 2
print ("Month expenditure of {}".format("Michelle"))
```

Output:

```
 -u "c:\TBC\Sem2\Principle of pr
ical6\monthlyExpenditureA.py"
Month expenditure of Michelle
PS C:\TBC\Sem2\Principle of prog
```

3. Monthly Expenditure B

```
4. foodExpenses = 300.0
5. leisureExpenses = 100.0 #assign 100.0 to leisureExpenses
6. clothesExpenses = 50.0 #assign 50.0 to clothesExpenses
7. totalSpent = 0.0 # float variable for total expenses, initialised to 0.
8.
9. totalSpent = foodExpenses + leisureExpenses + clothesExpenses
10.print("The total expenditure of this month was: {}".format(totalSpent))
```

Output:

```
 -u "c:\TBC\Sem2\Principle of programming\POP\Weekly
ical6\monthlyExpenditureB.py"
The total expenditure of this month was: 450.0
PS C:\TBC\Sem2\Principle of programming\POP\Weekly_A
```

4. Monthly Expenditure C:

```
foodExpenses = float(input("Enter food expenses: "))
accommodationExpenses = int(input("\nEnter accommodation expenses: "))
clothesExpenses = float(input("\nEnter clothes expenses: "))

totalExpenses = foodExpenses+accommodationExpenses+clothesExpenses
print("\nThe total expenditure of this month was: {}".format(totalExpenses))
```

Output:

```
ical6\monthlyExpenditureC.py"
Enter food expenses: 500

Enter accommodation expenses: 7000

Enter clothes expenses: 300

The total expenditure of this month was: 7800.0
PS C:\TBC\Sem2\Principle of programming\POP\Weekly_Assignment>
```

5. Validating Electricity Reading

```
previousMR = int(input("Enter the previous meter reading: "))
previousMR = int(input("Enter the previous meter reading: "))
currentMR = int(input("Enter the current meter reading: "))
day = int(input("Enter the day of the meter reading: "))
month = int(input("Enter the month of the meter reading: "))

if(previousMR<0 or previousMR>9999):
    print("\nError: Previous meter reading out of range!!!\n")

if(currentMR<0 or currentMR>9999):
    print("\nError: Curremt meter reading out of range!!!\n")

if(previousMR>currentMR):
    print("\nError: Previous reading greater than current reading.\n")
else:
    electricity_used = currentMR-previousMR
    if (electricity_used>1000):
        print("\nError: Electricity used is more than 1000\n")

if month<1 or month >12:
    print("Error: Month should be 1-12!!")
else:
    #Months which have 31 days
    if month in [1,3,5,6,8,10,12]:
        #if days is not 31
        if day!=31:
            print(f"\nError: Month {month} have 31 days!!!")
    #Months which have 30 days
    if month in [4,6,9,11]:
        #if days is not 30
        if day!=30:
            print(f"\nError: Month {month} have 30 days!!!")
    #Months which have 29 days
    if month ==2:
        #if days is not 29
        if day!=29:
            print(f"\nError: Month {month} have 29 days!!!")
```

Output:

```
ical6\electricityBillA.py"
Enter the previous meter reading: 900
Enter the current meter reading: 800
Enter the day of the meter reading: 23
Enter the month of the meter reading: 5

Error: Previous reading greater than current reading.

Error: Month 5 have 31 days!!!
PS C:\TBC\Sem2\Principle of programming\POP\Weekly_Assignment>
```

```
 -u "c:\TBC\Sem2\Principle of programming\POP\Weekly_Assignment\Pr
ical6\electricityBillA.py"
Enter the previous meter reading: 9000
Enter the current meter reading: 9999
Enter the day of the meter reading: 12
Enter the month of the meter reading: 2

Error: Month 2 have 29 days!!!
PS C:\TBC\Sem2\Principle of programming\POP\Weekly_Assignment>
```

6. Printing months from a list using for loop

```
#Practical 6, Part 4
#Michelle

print("Printing months from a list using a for loop: ")
months = ["Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul",
"Aug", "Sep", "Oct", "Nov", "Dec"]
for x in months:
    #Skips april
    if x=="Apr":
        continue
    print(x)
```

Output:

```
Printing months from a list using a for loop:
Jan
Feb
Mar
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
```

7. Printing Months

```
#Practical 6, Part 4
#Michelle

print("Printing months from a list using a for loop: ")
months = ["Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul",
"Aug", "Sep", "Oct", "Nov", "Dec"]
for x in months:
    #Skips april
    if x=="Apr":
        continue
    print(x)
```

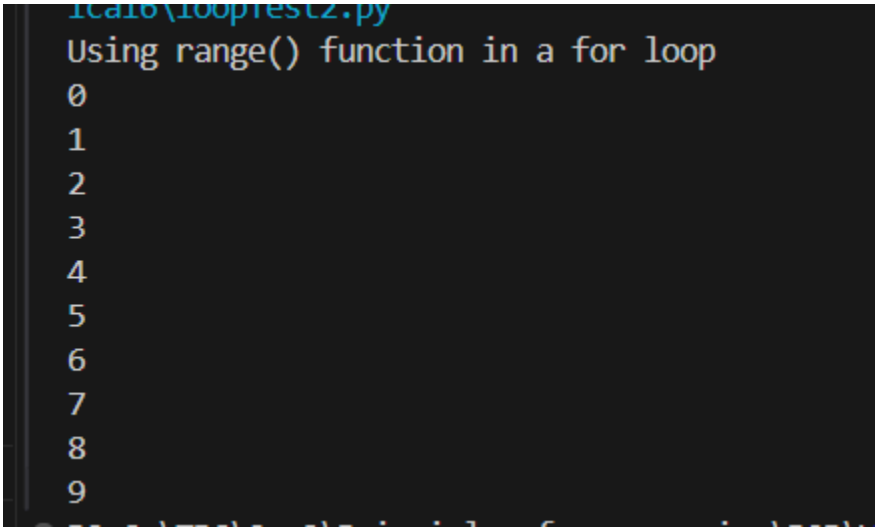
Output:

```
Printing months from a list using a for loop:
Jan
Feb
Mar
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
```

8. Priting number: Exercise 3

```
#Michelle
print("Using range() function in a for loop")
for x in range(10):
    #by default start from 1, and increases by 1 step
    print(x)
```

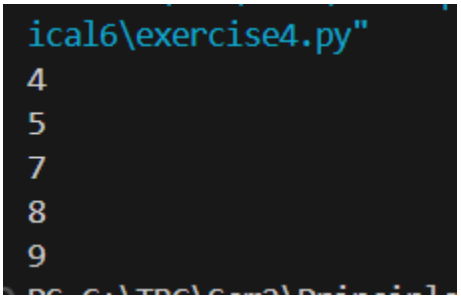
Output:



9. Printing numbers

```
for z in range(4,10):
    #prints from 4 to 9 but skips 6
    if z==6:
        continue
    print(z)
```

Output:



10. Taking input and printing

```
"""months = ["Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul",
"Aug", "Sep", "Oct", "Nov", "Dec"]
for i in range (12):
    print(f"Month: {months[i]}")"""

months = []
index = 0

#While loop for taking input
while index<12:
    m = input("Enter a month: ").capitalize()
    months.append(m)
    index+=1

#For loop for printing
print("\nNow printing the months you entered: \n")
for x in range(12):
    print(f"Month: {months[x]}")
```

Output:

```
Enter a month: Jan
Enter a month: Feb
Enter a month: mar
Enter a month: apr
Enter a month: may
Enter a month: jun
Enter a month: jul
Enter a month: aug
Enter a month: sep
Enter a month: oct
Enter a month: nov
Enter a month: dec

Now printing the months you entered:
```

```
Now printing the months you entered:

Month: Jan
Month: Feb
Month: Mar
Month: Apr
Month: May
Month: Jun
Month: Jul
Month: Aug
Month: Sep
Month: Oct
Month: Nov
Month: Dec
```

11. Repeated offender:

```
sus_Dna = [2.3, 3.3, 4.5, 6.7, 7.8, 2.1, 3.2, 4.3, 5.2, 6.5]

cri_Dna = [2.3, 3.3, 4.5, 6.7, 7.8, 2.1, 3.2, 4.3, 5.2, 6.5]

match = True
for i in range (10):
    #checks if each dna is same or not
    if sus_Dna[i]!=cri_Dna[i]:
         match=False
         #breaks if any one chromosome doesnot match
         break

if match == True:
    print("Repeated offender: Two profile matches")

else:
    print("Profile doesnot match")
```

Output:

```
PS C:\TBC\Sem2\Principle of programming\POP\We
  -u "c:\TBC\Sem2\Principle of programming\POP\
ical6\MatchingProfilesA.py"
Repeated offender: Two profile matches
PS C:\TBC\Sem2\Principle of programming\POP\We
```

12. Repeated offender using function

```
def matchingProfiles(cri,sus):
    match = True
    for i in range (10):
        #checks if each dna is same or not
        if sus[i]!=cri[i]:
            match=False
            #breaks if any one chromosome doesnot match
            break
    return match

def main():
    sus_Dna = [2.3, 3.3, 4.5, 6.7, 7.8, 2.1, 3.2, 4.3, 5.2, 6.5]
    cri_Dna = [2.3, 3.3, 4.5, 6.7, 7.8, 2.1, 3.2, 4.3, 5.2, 6.5]
    match= matchingProfiles(sus_Dna,cri_Dna)
    if match == True:
        print("Repeated offender: Two profile matches")
    else:
        print("Profile doesnot match")

main()
```

Output: