Assignment_3

Exercise:1

```
months = ["January", "February", "March", "April", "May", "June",
      "July", "August", "September", "October", "November", "December"]
month_number=int(input("Enter Month Number:"))
if 1 <= month_number <= 12:
   print(f"Month {month_number} is {months[month_number -1]}")
else:
   print("Error: Please enter a number between 1-12")
```

Output:

```
Enter Month Number:4
Month 4 is April

Process finished with exit code 0
```

Exercise:2

```
age = int(input("Enter your age:"))
ticket_cost = 6
if age < 16 :
   print("Your ticket cost is: $",ticket_cost/2)
elif age >= 60:
   print("Your ticket cost: $",ticket_cost/3)
else:
   print("Your ticket cost is: $",ticket_cost)
```

Output:

```
Enter your age:45
Your ticket cost is: $ 6

Process finished with exit code 0
```

Exercise:3

```
Weight = float(input("Enter your body weight in Kilograms:"))
Height = float(input("Enter your height in meters:"))

BMI = round(Weight/( Height ** 2),2)

if BMI < 18.5:
   print("Underweight")
elif 18.5 <= BMI < 25:
   print("Normal")
elif 25 <= BMI < 30:
   print("Overweight")
else:
   print("Obese")
print("BMI:",BMI)
```

Output:

```
Enter your body weight in Kilograms:75
Enter your height in meters:1.75
Normal
BMI: 24.49
```

Exercise:4

```
num = int(input("Enter a number:"))
if num < 0:
   print("Factorial is not defined for negative numbers.")
else :
   factorial=1
   for i in range (1,num+1):
      factorial*=i
print(f"Factorial of {num} is : {factorial}")
```

Output:

```
Enter a number:8
Factorial of 8 is : 40320

Process finished with exit code 0
```

Exercise:5

```
num = int(input("Enter a number:"))
if num < 0:
   print("Factorial is not defined for negative numbers.")
else :
   factorial=1
   for i in range (1,num+1):
      factorial*=i
print(f"Factorial of {num} is : {factorial}")
```

Output:

```
Enter a number:3
Factorial of 3 is : 6

Process finished with exit code 0
```

Exercise:6

```
number = int(input("Enter a number to reverse: "))
reversed_number = 0
```

```
while number != 0:
    digit = number % 10
    reversed_number = reversed_number * 10 + digit
    number //= 10
print(f"The reversed number is:{reversed_number}")
```

Output:

```
Enter a number to reverse: 987654321
The reversed number is:123456789

Process finished with exit code 0
```

Exercise:7

```
num=int(input("Enter a number:"))
for i in range(11):
    print(num,"*",i,"=",num*i)
```

Output:

```
Enter a number:3
3 * 0 = 0
3 * 1 = 3
3 * 2 = 6
3 * 3 = 9
3 * 4 = 12
```

Exercise:8

```
while True:
    user_input = input(':')
    if user_input.lower() == 'done':
        print('Done')
        break
    print(user_input)
```

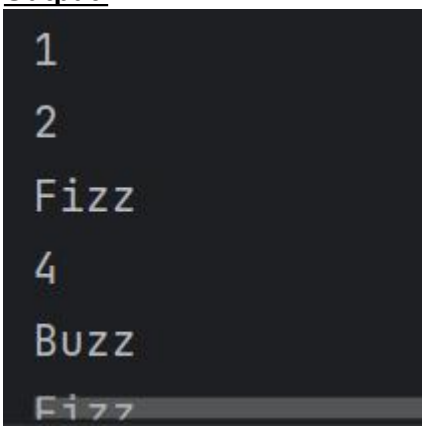
Output:

```
:hi
hi
:done
Done
```

Exercise:9

```
for i in range(1, 11):
    if i % 3 == 0 and i % 5 == 0:
        print("FizzBuzz")
    elif i % 3 == 0:
        print("Fizz")
    elif i % 5 == 0:
        print("Buzz")
    else:
        print(i)
```

Output:



Exercise:10

```
for i in range(5, 0, -1):
    for j in range(i, 0, -1):
        print(j, end=' ')
    print()
```

Output: