Python Programming

Assignment – 6

While Loop

1) Write a python program to reverses a number using a while loop.
2) Write a python to check whether a number is palindrome or not?
3) Write a python program finding the factorial of a given number using a while loop.
4) Accept numbers using input() function until the user enters 0. If user input 0 then break the while loop and display the sum of all numbers.
5) Program to check whether the given number is Armstrong or not.

1) Write a python program to reverses a number using a while loop.

Sol :

```
number = int(input("Enter the number = "))

rev = 0

while number > 0:

    digit = number % 10

    rev = rev*10+digit

    number = number // 10


print("Reverse Digit is  = ",rev)
```

2) Write a python to check whether a number is palindrome or not?

Sol :

```
num = int(input("Enter the number = "))
temp = num
rev = 0
while num > 0:
   digit = num % 10
   rev = rev*10+digit
   num = num // 10
if temp == rev:
   print("Pallindrome Number ")
else:
   print("Not a Pallindrome Number ")
```

3) Write a python program finding the factorial of a given number using a while loop.

Sol :

```
num = int(input("Enter the number = "))
fact = 1
for i in range ( 1, num + 1):
   fact = fact * i

print(" The factorial of number is = ",fact)
```

4) Accept numbers using input() function until the user enters 0. If user input 0 then break the while loop and display the sum of all numbers

Sol :

```
sum = 0
print("Enter the number to add ( enter ) to stop ")
while True:
    num = int(input("Enter the number = "))
    if num == 0:
        break
    sum = sum + num
print(f" The sum of all numbers entered is = ",sum)
```

5) Program to check whether the given number is Armstrong or not.

Sol :

```
n = int(input("Enter the number = "))
result = n
sum = 0
rem = len(str(n))
while n>0:
    digit = n%10
    sum = sum+digit**rem
    n = n//10

if sum == result:
    print("Armstrong number")
else:
    print("Not a Armstrong number")
```