

While loop Assignment 2

September 21, 2024

Do the dry run on following program in your notebook:

Q1.

x=5

While (x<10):

 print(x+10)

 x+=2

Q2.

x=10

y=0

While x>y:

 x=x-4

 y+=4

 print(x)

Q3.

n = 3

while n >= 0:

 if n == 0:

 print("Blast off!")

 else:

 print(n)

 n -= 1

Q4.

```
total = 0
num = 5
while num > 0:
    total += num
    num -= 1
print("Total:", total)
```

Q5.

```
num = 10
while num >= 0:
    if num > 5:
        print(num, "is greater than 5")
    elif num == 5:
        print(num, "is equal to 5")
    else:
        print(num, "is less than 5")
    num -= 1
```

Q6.

```
n = 1
while n <= 15:
    if n % 3 == 0 and n % 2 == 0:
        print(n, "is a multiple of both 3 and 2")
    n += 1
```

Q7.

```
num = 12
divisor = 1
while divisor <= num:
    if num % divisor == 0:
        print(divisor)
    divisor += 1
```

Q8.

```
a = 2
b = 3
while a <= 20:
    if a % b == 0:
        print(a, "is divisible by", b)
    a += 2
    b += 1
```

Q9. Write a program to generate squares of even numbers between 1 to 10.
Output: 4,16,36,64,100

Q10. Write a program to print Multiples of 3 and 5 between 1 to 30.
Output: 15, 30

Q11. Write a program to calculate the sum of numbers from 1 to 10 using a while loop.
Output: 55

Q12. Write a program to calculate Sum of Odd Numbers up to 30 using while loop

