**Pseudo codes and Flowcharts**

1.Ask a user to enter a number.

* If the number is between 0 and 10, write the word blue.
* If the number is between 10 and 20, write the word red.
* If the number is between 20 and 30, write the word green.
* If it is any other number, write that it is not a correct color option.

**PSEUDO CODE:**

Output “Please enter a number”

Input = “A”

If A>0 and A<10, then

Output = Blue

elseif A>10 and A<20, then

Output = Red

elseif A>20 and A<30, then

Output = Green

else Output “It is not a correct color option.”

End if

**FLOWCHART:**

Output “Enter a number”

Input

A = Input

Yes

Output “Blue”

A>0 & A<10

No

Yes

Output “Red”

A>10 & A<20

Yes

No

Output “Green”

A>20 & A<30

No

Output “It is not a correct color option”

2.Pseudo code and Flowchart to print all multiples between 1 and 100 (including both 1 and 100)

**PSEUDO CODE:**

N = 1

Loop while N <= 100

If N modulus (%) 5 = 0 then

Output = N

End if

N ++

End loop

**FLOWCHART:**

N=1

No

N<=100

Yes

No

N%5 = 0

Yes

Output = N

N=N+1

3.Pseudo code and flowchart that count all the even numbers, until the user defines a stopping point.

**PSEUDO CODE:**

Input = I

N = 0

Loop until N <= I

N = N + 2

Output = N

End loop

**FlOWCHART:**

Input

Input = I & N=0

Yes

N >= I

No

N = N+2

Output = N

4.Pseudo code and flowchart solution, which will take in an integer value and determine whether the value is odd or even.

**PSEUDO CODE:**

Output = “Enter an integer”

Input = I

If I modulus 2 = 0 then

Output = “Integer is even”

Else

Output = “Integer is odd”

End

**FLOWCHART:**

“Enter an integer”

Input = I

No

N%2 = 0

“Integer is Odd”

Yes

“Integer is Even”

References:

* Difference Between Algorithm and Flowchart. (2020, May 21). Retrieved January 24, 2021, from <https://www.geeksforgeeks.org/difference-between-algorithm-and-flowchart/#:~:text=A%20flowchart%20is%20a%20graphical,tool%20to%20solve%20a%20problem.&text=Algorithm%20is%20step%20by%20step,show%20the%20flow%20of%20data>.
* Paradigm, V. (2020). Https://www.visual-paradigm.com/tutorials/flowchart-tutorial/#:~:text=A%20flowchart%20is%20simply%20a,by%20connecting%20them%20with%20arrows. Retrieved January 26, 2021, from <https://www.visual-paradigm.com/tutorials/flowchart-tutorial/#:~:text=A%20flowchart%20is%20simply%20a,by%20connecting%20them%20with%20arrows>.
* FORTRAN90, F. (2018). Draw a flowchart and write an algorithm to print the positive even numbers less then 100. Retrieved January 25, 2021, from https://www.youtube.com/watch?v=Wp4wRzxm3\_E