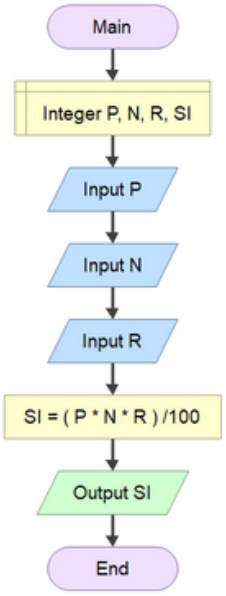
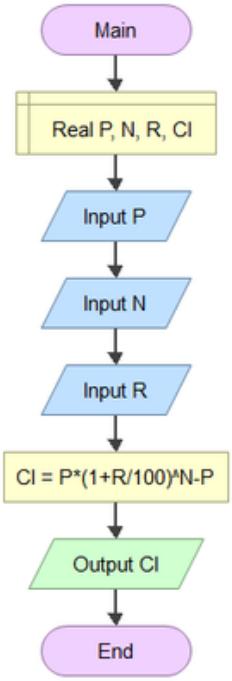
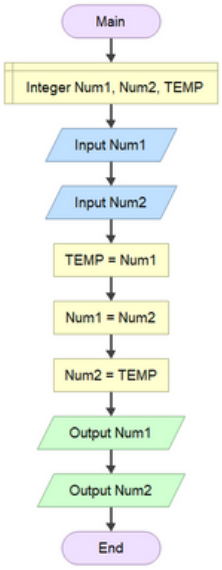
Exercise 1: Write an algorithm and a flowchart to find Simple Interest.

	Algorithm Flowchart
P : Principle Amount N : Time in Years R : % Annual Rate of Interest SI : Simple Interest Step-1 Start Step-2 Input value of P , N, R Step-3 SI=(PxNxR)/100 Step-4 Display SI Step-5 Stop	

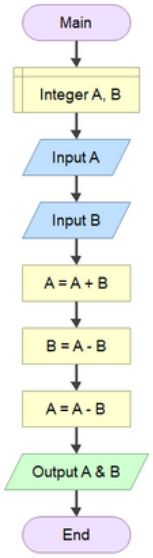
Exercise 2: Write an algorithm and a flowchart to find Compound Interest. Algorithm Flowchart

P : Principle Amount N : Time in Years R : % Annual Rate of Interest CI : Compound Interest Step-1 Start Step-2 Input value of P,N,R Step-3 CI = P(1+R/100)^N - P Step-4 Display CI Step-5 Stop	

Exercise 3: Write an algorithm and a flowchart to swap two numbers with temporary variable.

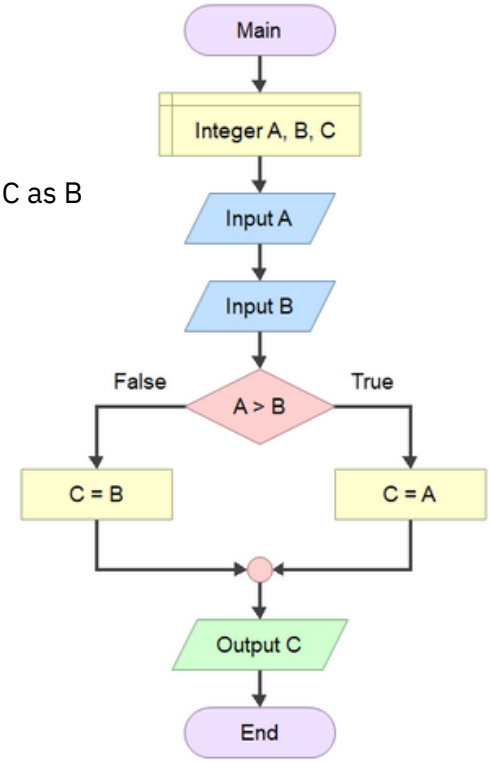
Algorithm	Flowchart
Step-1 Start Step-2 Input Two Numbers Say NUM1,NUM2 Step-3 Display Before Swap Values NUM1, NUM2 Step-4 TEMP = NUM1 Step-5 NUM1 = NUM2 Step-6 NUM2 = TEMP Step-7 Display After Swap Values NUM1,NUM2 Step-8 Stop	

Exercise 4: Write an algorithm and a flowchart to swap two numbers without temporary variable.

Algorithm	Flowchart
Step-1 Start Step-2 Input Two Numbers Say A,B Step-3 Display Before Swap Values A, B Step-4 A=A+B Step-5 B=A-B Step-6 A=A-B Step-7 Display After Swap Values A, B Step-8 Stop	

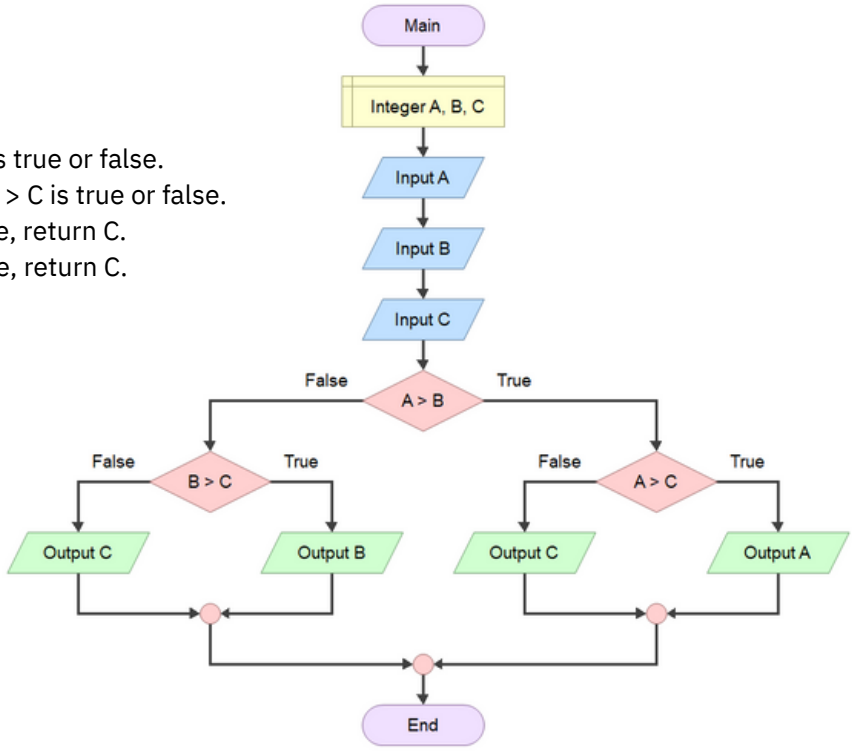
Exercise 5: Write an algorithm and a flowchart to find the largest of two numbers.

Step-1 Start
Step-2 Integer = A, B, C
Step-3 Input Numbers say A, B
Step-4 If A > B is True, store C as A otherwise, return C as B
Step-5 Display C value
Step-6 Stop



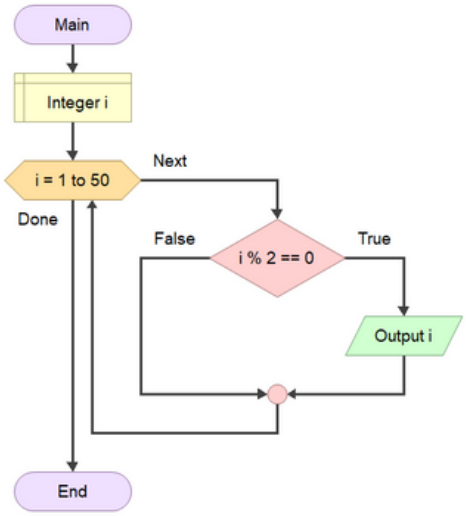
Exercise 6: Write an algorithm and a flowchart to find the largest of three numbers.

Step-1 Start
Step-2 Integer = A, B, C
Step-3 Input Numbers say A, B, C
Step-4 If A > B is true, check if A > C is true or false.
If A > B is false then check if B > C is true or false.
Step-5 If A > C is true, return A, if false, return C.
If B > C is true, return B, if false, return C.
Step-6 Stop



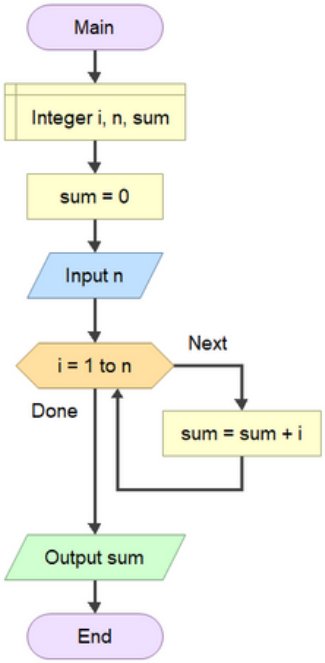
Exercise 7: Write an algorithm and a flowchart to find even numbers between 1 to 50.

Step-1 Start
Step-2 Integer = I
Step-3 i equals 1. If i is between 1 and 50, i % 2 == 0 is satisfied.
Step-4 If i % 2 == 0 is true then return i and repeat step 3.
Step-5 If step 3 conditions are not met, proceed to the next step.
Step-6 Stop



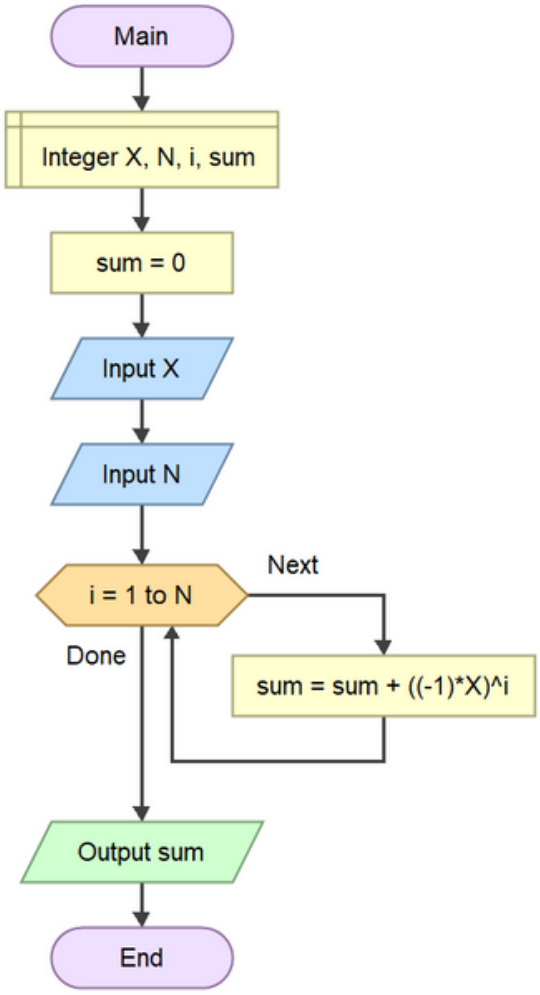
Exercise 8: Write an algorithm and a flowchart to find sum of series 1 + 2 + 3 + ... + *N*.

Step-1 Start
Step-2 Integer = i, n, sum
Step-3 sum = 0
Step-4 Input Numbers say n
Step-5 i equals 1. If i is between 1 and n
Step-6 sum = sum + i
Step-7 Go back and do step 5 until the condition is not true.
Step-8 Display sum value
Step-9 Stop



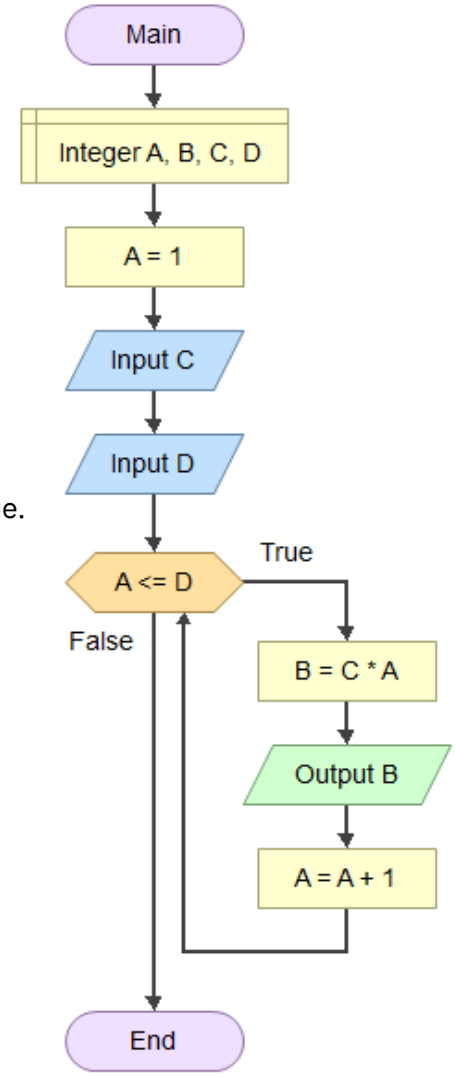
Exercise 9: Write an algorithm and a flowchart to find sum of series 1 – X + X^2 – X^3 + … + X^N

Step-1 Start
Step-2 Integer = X, N, i, sum
Step-3 sum = 0
Step-4 Input Numbers say X , N
Step-5 i equals 1. If i is between 1 and N
Step-6 sum = sum + ((-1)*X)^i
Step-7 Display sum value
Step-6 Stop



Exercise 10: Write an algorithm and a flowchart to print multiplication table of a number.

Step-1 Start
Step-2 Integer = A, B, C, D
Step-3 A = 1
Step-4 Input Numbers say C, D
C = number to multiply
D = number to multiply
Step-5 i equals 1. If i is A <= D
Step-6 B = C x A
Step-7 Display B value
Step-8 A = A + 1
Step-7 Go back and do step 5 until the condition is not true.
Step-6 Stop



Exercise 11: Write an algorithm and a flowchart to find sum of series 1 – X + X^2 – X^3 + ... + X^N

Step-1 Start
Step-2 Integer = X, N, i, sum
Step-3 sum = 0
Step-4 Input Numbers say X , N
Step-5 i equals 1. If i is between 1 and N
Step-6 sum = sum + ((-1)*X)^i
Step-7 Go back and do step 5 until the condition is not true.
Step-8 Display sum value
Step-9 Stop