LAB 12 (CONDITIONAL STRUCTURE)

By:

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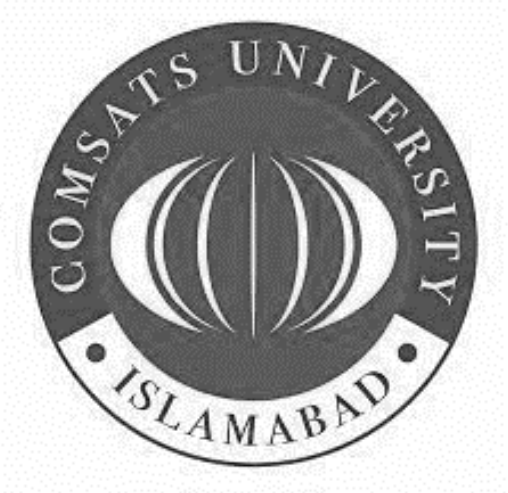

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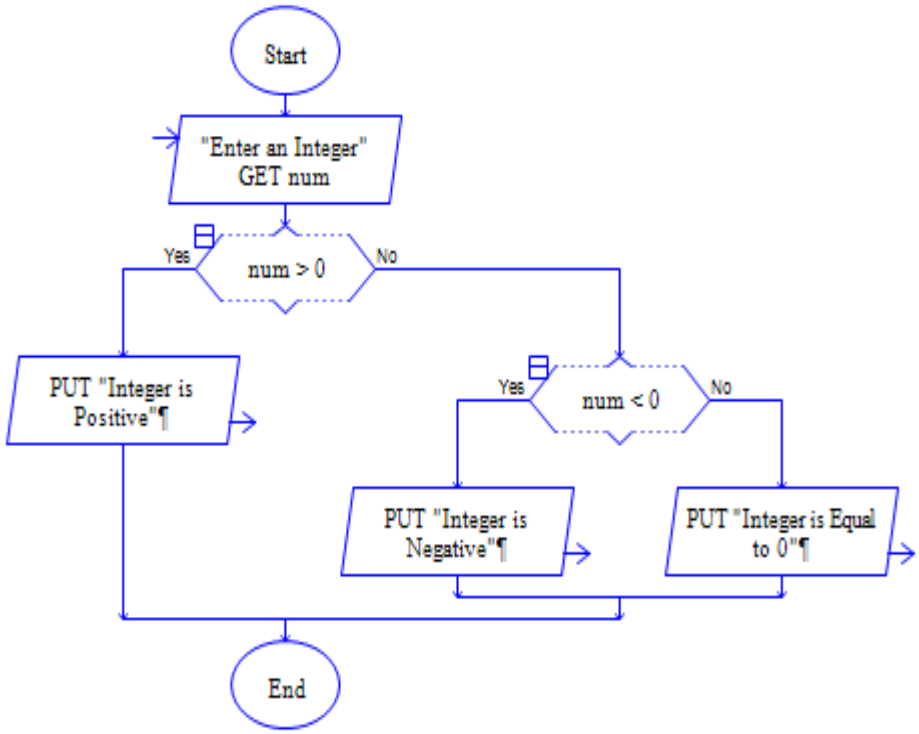
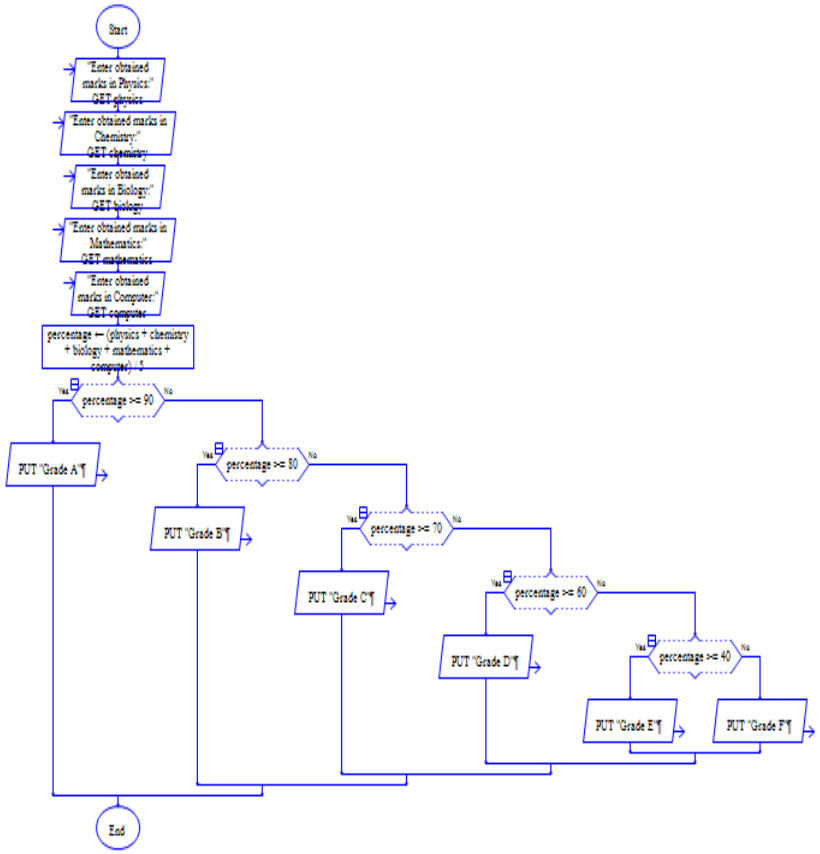
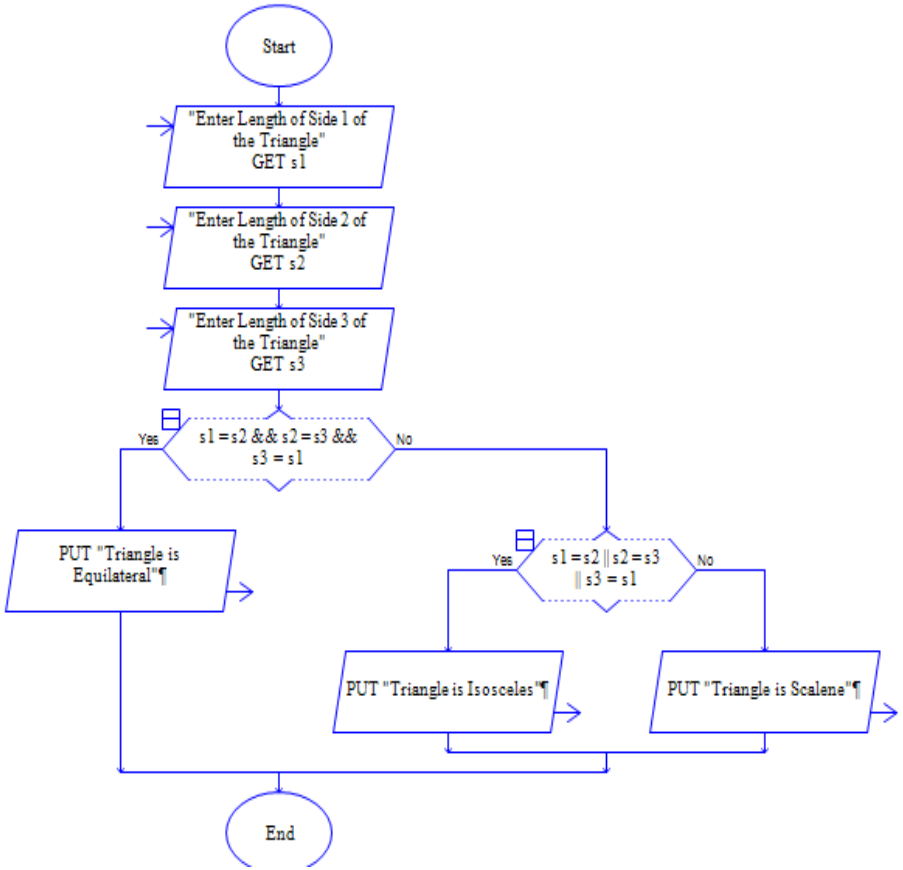
Lab task 1 :

ALGORITHM		FLOWCHART
• Enter the number is "number" • If the number is bigger than zero "The number is positive" • If the number is less than zero "The number is negative" • If the number is neither of the both then the number is zero		If number = number Then If number > o Number is positive Then If number <0 Number is negative Else Print"Number is zero"

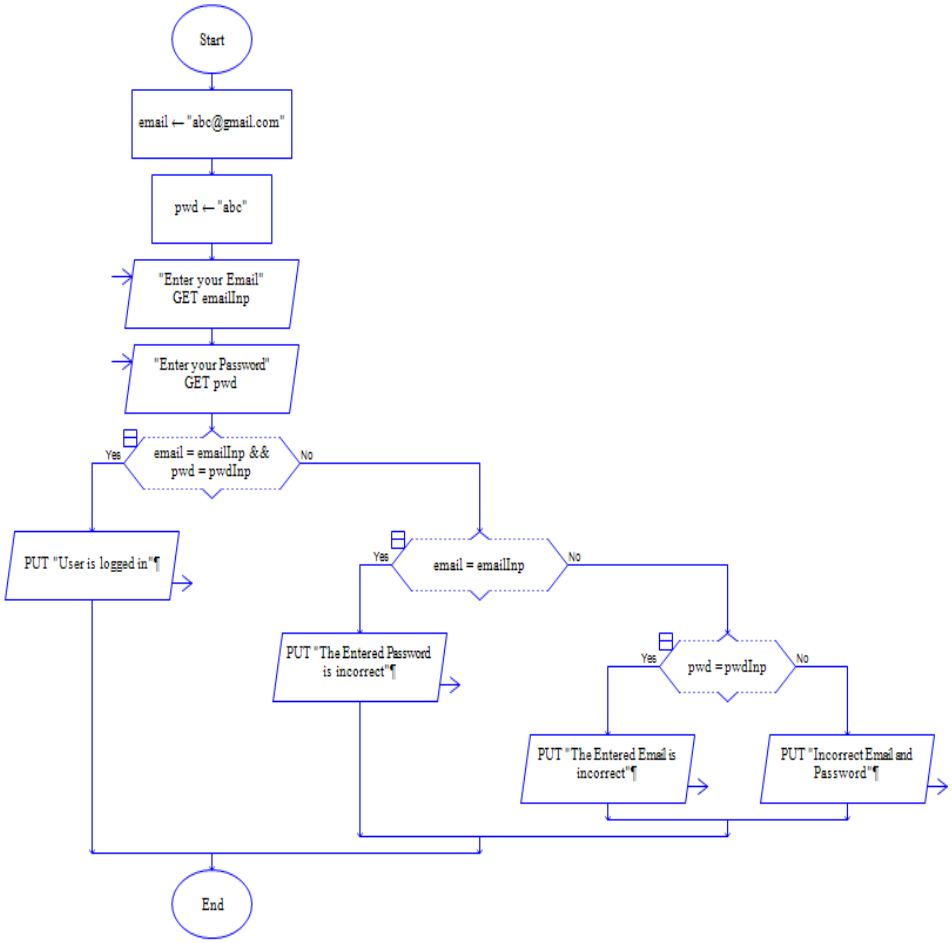
Lab task 2 :

ALGORITHM	FLOWCHART	PSEUDOCODE
• Enter the obtained marks of the subjects Physics, Chemistry, Math, Computer and bio • Then make the percentage by dividing by total number and multiplying by hundred • then make if else statement to describe the grade obtained • by the student in the exams		Marks=Input= Obtained Marks of subjects Percentage=marks*100/total marks If percentage >=90 print"The grade is A" If percentage >=80 Print"The grade is B" If percentage >=70 Print"The grade is C" If percentage >=60 Print"The grade is D" If percentage >=40 Print"The grade is E" Else Print"The grade is F"

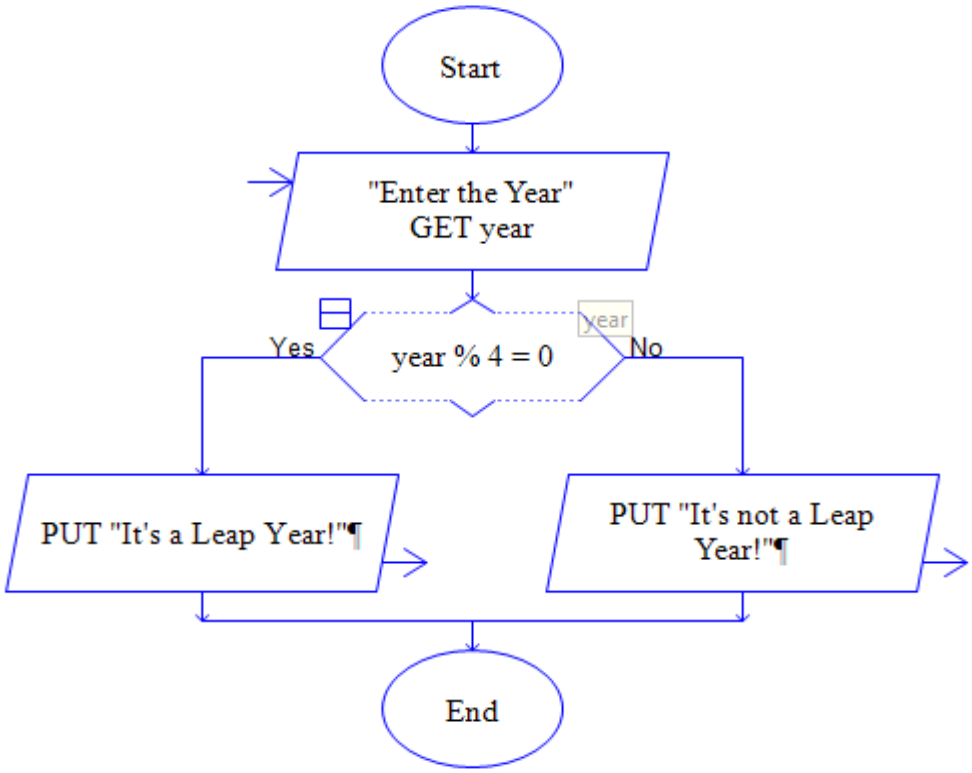
Lab task 3 :

ALGORITHM	FLOWCHART	PSEUDOCODE
• Enter the sides of the triangle • If The side 1 is equal to side 2 , side 2 is equal to side 3 and side 1 is equal to side 3 then“it is equilateral triangle” • If The side 1 is equal to side 2 or side 2 is equal to side 3 or side 1 is equal to side 3 then “it is a isosceles triangle” • Else The triangle is scalene		Side1=side1 of the triangle Side2=side2 of the triangle Side3=side3 of the triangle If side1=side2=side3: print“Triangle is equilateral” Elif side1=side2 or side2=side3 or side3=side1: print“Triangle is isosceles” Else print“Triangle is scalene”

Lab task 4 :

ALGORITHM	FLOWCHART	PSEUDOCODE
• Email= abc@gamil.com • Password=abcd • Input the email address and the password. • If The email and input email is equal and password is also equal to the input password "you have logged in" • If both email are correct but password are incorrect "The password is incorrect" • If both the passwords are correct but email is incorrect "The email is incorrect" • Else both the password and email is incorrect		Email=" email" Password=" password" Email1=input= Email address Password1=input= Password If email=email1 and password=password1: print"You have logged in" Elif email=email1 and password!=password1: print"The password is incorrect" Elif email !=email1 and password=password: print"The email is incorrect" Else : print"Email and password both are incorrect"

Lab task 5 :

ALGORITHM	FLOWCHART	PSEUDOCODE
• Enter the year • If the modulus of the year by 4 is equal to zero then "It is a leap year" • Else It is not a leap year		Year=input(Enter the year) If year%4=0: print"It is a leap year" Else : print"It is not the leap year"

Python codes:

- **Lab task 1:**

```
1   num=eval(input("Enter the number:\n"))
2   if num > 0:
3       print("The input number is even")
4   elif num < 0:
5       print("The input number is odd")
6   else:
7       print("The input number is zero")
```

➢ **Lab task 2:**

```
phy=eval(input("Enter the obtained marks of phy:\n"))
chem=eval(input("Enter the obtained marks of chem:\n"))
math=eval(input("Enter the obtained marks of math:\n"))
bio=eval(input("Enter the obtained marks of bio:\n"))
computer=eval(input("Enter the obtained marks of computer:\n"))
total_marks=500
total=phy+chem+math+bio+computer
per=(total*100)/total_marks
if per>=90:
    print("You have sussessfully obtained A grade")
elif per>=80:
    print("You have sussessfully obtained B grade")
elif per>=70:
    print("You have sussessfully obtained C grade")
elif per>=60:
    print("You have sussessfully obtained D grade")
elif per>=40:
    print("You have sussessfully obtained E grade")
else:
    print("You have sussessfully obtained F grade")
```

➢ **Lab task 3:**

```
side1=eval(input("Enter the first side of the triangle:\n"))
side2=eval(input("Enter the second side of the triangle:\n"))
side3=eval(input("Enter the third side of the triangle:\n"))
if side1 == side2 == side3:
    print("The triangle is eqilateral triangle")
elif side1 == side2 or side2 == side3 or side3 == side1:
    print("The triangle is isosceles triangle")
else:
    print("The triangle is scalene triangle")

```

➢ **Lab task 4:**

```
email="abc@gmail.com"
password="abcd"
email1=input("Enter the email address:\n")
password1=input("Enter the password:\n")
if email == email1 and password == password1:
    print("You are logged in")
elif email == email1 and password != password1:
    print("The password is incorrect")
elif email != email1 and password == password1:
    print("The email s incorrect")
else :
    print("Email and password both are incorrect")

```

➢ **Lab task 5:**

```
year=int(input("Enter the year:\n"))
if year%4 == 0:
    print("It is a leap year")
else:
    print("it is not a leap year")
```