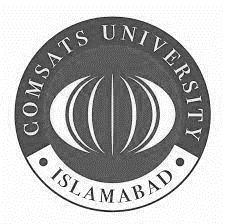
LAB 12 (CONDITIONAL STRUCTURE)

By:

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**Submitted to:** SIR KHURRUM IQBAL

**Subject:** INTRODUCTION TO COMMUNICATION TECHNOLOGY

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**DEPARTMENT OF COMPUTER SCIENCE**

**COMSATS UNIVERSITY**

**ISLAMABAD**

**Lab task 1 :**

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| **ALGORITHM** | **FLOWCHART** | **PSEUDOCODE** |
| * 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    If number > o:  print“Number is positive”    If number <0:  Print”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 :**

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| **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 :**

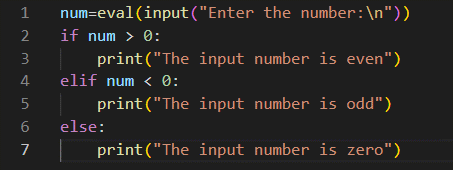
|  |  |  |
| --- | --- | --- |
| **ALGORITHM** | **FLOWCHART** | **PSEUDOCODE** |
| * Email= [abc@gamil.com](mailto:abc@gamil.com) * Password=abcd * Input the email address and the password. * If The email and input email is equal and password is also equal to the input password then“you have logged 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” |

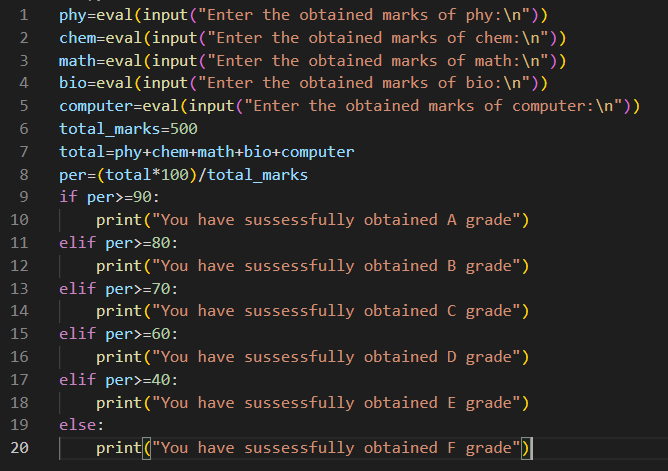
**Lab task 5 :**

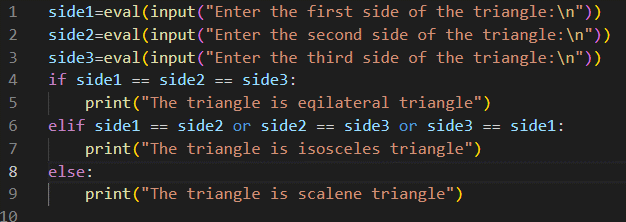
|  |  |  |
| --- | --- | --- |
| **ALGORITHM** | **FLOWCHART** | **PSEUDOCODE** |
| * Enter the year * Take the modulus of the year by 4 is equal to zero then “It is a leap year” * Else “It is not a leap year” |  | Year=input(Enter the year)  If year%4=0:  print“It is a leap year”  Else :  print“It is not the leap year” |

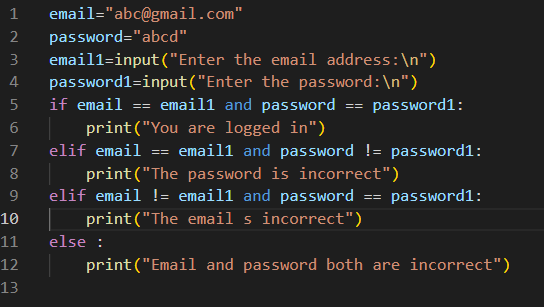
Python codes:

* **Lab task 1:**



* **Lab task 2:**
* **Lab task 3:**



* **Lab task 4:**
* **Lab task 5:**

