INDIAN SCHOOL AL WADI AL KABIR

Class: XII Comp Sci.	Department: Computer Science	Date of submission: 20/07/2020
Worksheet No: 4	Topic: List of Practical (Python Programs)	Note: Programs should be written in FS2Q Note Book.

Q. 1) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Input a number N and check whether it is a **prime No or not**.
2	Input Area (A) and height (h) of a Cone and calculate its volume ($V = \frac{1}{3} Ah$).
3	Invalid choice

Q. 2) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Input radius (r) of a **Sphere** and calculate its volume ($V = \frac{4}{3} \pi r^3$).
2	Input Marks of 50 students, Calculate and print **Maximum** and **Minimum Mark**s.
3	Invalid choice

Q. 3) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Input a Number, calculate and print its **factorial value**.
2	Input 4 Bases (A, B, C, D) of a **Trapezoid**, calculate and display its Perimeter (**P = A + B + C + D**).
3	Invalid choice

Q. 4) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Input 2 diagonal side values P and Q of a **Rhombus** and calculate and display its Area (**Area** = $\frac{P*Q}{2}$).
2	Input **Net Salary of N employees**, Calculate and display the **count of No. of Employees** who **earned More than Rs. 50,000**.
3	Invalid choice

Q.5) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Input the Book Title, Price of the Book, No. of Copies, calculate and display the **Bill Amount** (**Price * No. of copies**).
2	To display all the Odd Factors of a Number. (For eg: If the **No. is 30** – **Odd factors** of 30 are 1**, 3, 5, 15**).
3	Invalid choice

Q. 6) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Read the distance in meters, convert and print it in __ Kilometer and __ Meters format. Eg: If Input is **8475 meters**, then Output will be **8 Kilometers and 475 Meters.**
2	To display all the Even Factors of a Number. (For eg: If the **No. is 20** – **Even factors** of 20 are **2, 4, 10, 20**).
3	Invalid choice

Q.7) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Input the Bill amount of a Garment Purchasing, calculate and display the **Tax Amount (8 % of Bill Amount)** and **Amount Payable (Bill Amount + Tax)**.
2	To display the **sum of all nos**. which are **divisible by 8** between **500** and **750**.
3	Invalid choice

Q. 8) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Input the **Semester Fees** of a student during their admission in COVID 19 pandemic period, calculate and display the **Special Discount (30 % of Bill Semester Fees)** and **Fees Payable (Semester Fees – Special Discount)**.
2	To count and display all the multiples of 6 between 100 and 300.
3	Invalid choice

Q.9) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Input the **temperature in Celsius**, Convert and display the **temperature in Fahrenheit (F = 1.8 C + 32)** .
2	To display the sum of the series up to n terms $1 + \frac{x}{1} + \frac{x^2}{2} + \frac{x^3}{3} + \cdots + \frac{x^n}{n}$.
3	Invalid choice

Q. 10) Write a Python program to perform the following operations as per the user's choice.

Choice	Task
1	Input the **Amount** (**OMR**) to transfer to India at a Money Exchange in Oman, Calculate and display the **Transferred Amount in INR. (1 OMR = 194.173 INR**).
2	To display the sum of the series up to n terms $1 - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \cdots \pm \frac{x^n}{n}$
3	Invalid choice