Assignment-2

Q1. The cost of one type of mobile service is Rs.250 plus Rs.1.25 for each call made over and above 100 calls. Write a program to read calls made and print the bill for customer.

Q2. Write a program that determines whether a given integer is odd or even and displays the number and description on the same line.

Q3.Write a program to find the number of and sum of all integers greater than 100 and less than 200 that are divisible by 7.

Q4. Write a program in "QUANT.C" which "quantifies" numbers. Read an integer "x" and test it, producing the following output: x greater than or equal to 1000 print "hugely positive" x from 999 to 100 (including 100) print "very positive" x between 100 and 0 print "positive" x exactly 0 print "zero" x between 0 and -100 print "negative" x from -100 to - 999 (including -100) print "very negative" x less than or equal to -1000 print "hugely negative" Thus -10 would print "negative", -100 "very negative" and 458 "very positive". In the following solution the words "very" and "hugely" are printed separately from "positive" and "negative".

Q5. Calculate the BMI (Body Mass Index)of a user.
$bmi=mass(kg)/(height(m))^2$, $bmi=(mass(lb)/(height(in))2)*730$
Do it in SI units (m and kg; extra credit for feet and inches).Tell the user their BMI, then whether they are underweight, healthy, overweight or obese.Think about using(< > >= <=<= etc)?

Category	BMI range – kg/m²	BMI Prime
Very severely underweight	less than 15	less than 0.60
Severely underweight	from 15.0 to 16.0	from 0.60 to 0.64
Underweight	from 16.0 to 18.5	from 0.64 to 0.74
Normal (healthy weight)	from 18.5 to 25	from 0.74 to 1.0
Overweight	from 25 to 30	from 1.0 to 1.2
Obese Class I (Moderately obese)	from 30 to 35	from 1.2 to 1.4
Obese Class II (Severely obese)	from 35 to 40	from 1.4 to 1.6
Obese Class III (Very severely obese)	over 40	over 1.6

Q6. An electric power distribution company charges its domestic consumers as follows.Consumption Units Rate of Charge 0-200 Rs.0.50 per unit , 201-400 Rs.100 plus Rs.0.65 per unit , 401-600 Rs.230 plus Rs.0.80 per unit .Write a C program that reads the customer number and power consumed andprints the amount to be paid by the customer.