

Assignment 1(a):

To be submitted till Monday morning, using the Google classroom

Introduction to algorithms and programming logic

1. Write a program that takes input radius of a circle and prints Area of Circle (Area of circle = πr^2 , and Area of sphere of same radius (area of sphere = $\frac{4}{3} \pi r^3$)
2. Write pseudo-code to a convert a centigrade temperature to Fahrenheit. Formula for this conversion is $F = C * 9 / 5 + 32$. Where C is temperature in centigrade and F = temperature in Fahrenheit .
3. Write pseudo-code to a convert a Fahrenheit temperature to centigrade. (Transform the formula for finding the Fahrenheit temperature given above)
4. Write pseudo code to input current selling price and discount percentage and print discounted selling price.
5. Write a program that takes input width and depth of a hockey ground in meters, and price of Astroturf in Rs. Per square foot. The required output is the area of the ground in in square feet and cost of Astroturf for the ground.

Assignment 1(b):

To be submitted till 24-Feb-2022 (Thursday) morning, using the Google classroom

Introduction to python programming

Using the physics formula described in the document available at the following URL

<https://cdn1.byjus.com/physics/2018/07/09072414/Physics-Formulas.pdf>

Write python programs to solve physics problems. Use your innovation to formulate a question first and then write its pseudocode/python program.