

Question 01

We want to replicate the Covid-19 Vaccination notification system. The user input the date of a person who has received the first dose of vaccine they should receive the text message telling them the next date for the 2nd dose.

Vaccine Name	Waiting Period for 2nd Dose
Pfizer 'F'	24
Moderna 'M'	25
Sinopharm 'S'	15
Sinovac 'V'	18
Pakvac 'P'	21
AstraZeneca 'A'	Not Required

Sample Input

Enter the Day of the first dose of vaccination: 12

Enter the Month of the first dose of vaccination: 7

Enter the Year of the first dose of vaccination: 2021

Enter the vaccination Name: P

Sample Output

Please receive the second dose of vaccination after 02/08/2021 from any nearby vaccination center.

Question 02

Input a five-digit number from the user (make sure the number is exactly 5 digits). Calculate the sum of the digits and display the sum.

Sample Input

12345

Sample Output

15

Question 03

The store policy is to offer a 5% discount if the purchase is above 5000, and if the purchase exceeds 10% they are offered a 10% discount. Based on the purchase calculate how much amount the customer has saved.

Note: Use the ternary operator to solve the problem.

Sample Input

Please enter the purchasing cost: 10000

Sample Output

You are offered a 10% discount, you have saved 1000 Rs on your purchase.

Kindly only pay 9000 Rs.

Question 04

You are making a Salah Counter, which asks users if they have offered Fajar Zuhar Asar Maghrib and Isha as well as if they offered the prayer in congregation (Jammat) or not. If all of the prayers were offered with jamaat then it displays “Alhamdulillah, you had a blessed day”. If a Jammat is missed it displays “Jammat enhances the darajat of Salah by 27 times.”

If Fajr is missed it displays “Salah is better than Sleep”, for the other four it displays “Prayer is the pillar of the religion; he who abandons it demolishes his religion”.

The Non-Muslims students have the liberty to make the program for their prayer.

Sample Input

Have you offered Fajr Prayer: Y

Was the Fajr Offered with Jammat: Y

Have you offered Zuhur Prayer: Y

Was the Zuhur Offered with Jammat: Y

Have you offered Asr Prayer: Y

Was the Asr Offered with Jammat: Y

Have you offered Maghrib Prayer: Y

Was the Maghrib Offered with Jammat: Y

Have you offered Isha Prayer: Y

Was the Isha Offered with Jammat: Y

Sample Output

Alhamdulillah, You had a blessed day.

Question 05

The airline tickets are most expensive if you are purchasing on the same day and least expensive if purchased earlier. If a ticket is reserved 7 days before the flight then it charges no extra amount, on the 6th day the price is incremented by 10%, on the 5th day 15%, on the 4th day 17%, on the 3rd day 20%, on the 2nd day by 15% and on the final day it is double the original price.

Write a program that asks the user the current date and city from which the user will take the flight and the city to which he is traveling as well as the date of flight. Provided the following prices calculate the amount user has to pay.

From	To	Amount
Lahore 'L'	Karachi 'K'	13,940
Islamabad 'I'	Karachi 'I'	13, 940
Islamabad 'I'	Lahore 'L'	32,500
Islamabad 'I'	Gilgit 'G'	25,850

Question 06

Given the date of joining the clients get the discounts if they have joined as member 5 years before they will be offered 10% discount on all products if they have joined 3 years before they

will enjoy 5% discount and if they are only 1-year-old member, they will enjoy 2.5% discount on all products.

Ask the user their date of joining, and their bill based on their membership reduce their payable bill.

Sample Input

Please Enter the Year of Joining: 2015

Please Enter Month of Joining: 6

Please Enter Day of Joining: 12

Please Enter the Purchasing Cost: 9870

Sample Output

You are offered a 10% Discount. Kindly pay only Rs. 8883 only.

You have saved Rs. 987.

Question 07

Ask the user to input 10 numbers in ascending order. Verify if the user has correctly entered numbers in ascending order or not.

Display a “Thank you, Your input is in order” if numbers are in ascending order and “NOT COOL” if they are not.

Sample Input

2 5 8 9 19 29 49 102 250 870

Sample Output

Thank you, Your input is in order.

Question 08

Ask the user to enter 10 positive integers and find the maximum and minimum number, if the user enters a negative number exit the program displaying the message "NOT COOL". If all numbers are positive display the maximum and minimum numbers as well as if they are even or odd.

We can exit the program using `exit(1);` statement.

Sample Input

20 12 891 981 750 400 3 5 20 2

Sample Output

The maximum number is 981 and it is an Odd Number.

The minimum number is 2 and it is an Even Number.