**Assignment No-5**

**Problem statement :-**

User defined exception to check the following conditions and throw the exception if the criterion does not meet.

A. User stays in Pune/Mumbai/Bangalore/Chennai.

B. User has 4-wheeler city , vehicle from the user and check for the conditions mentioned above .if any of the condition not met then throw the exception .if user does not enter proper input throw the exception.

**Aim:-**

To understand concept of exception as well as user defined exception.

**Description:-**

In this problem statement state that how to make user defined exception.

**OOP concept:-**

**Exception handling:-**

 An **exception** is a problem that arises during the execution of a program. A **C++ exception** is a response to an exceptional circumstance that arises while a program is running, such as an attempt to divide by zero. ... **C++ exception handling** is built upon three keywords: try, **catch**, and throw.

* **Try :** The try block contain statements which may generate exceptions.
* **Throw :** When an exception occur in try block, it is thrown to the catch block using throw keyword.
* **Catch :**The catch block defines the action to be taken, when an exception occur.

**Program:-**

**#include<iostream>**

**using namespace std;**

**class demo{**

**};**

**class d{**

**};**

**int main(){**

**string city,vehical;**

**cout<<"Enter city: ";**

**cin>>city;**

**cout<<"Enter vehical: ";**

**cin>>vehical;**

**try{**

**if(city=="pune"||city=="mumbai"||city=="banglore"||city=="chennai"){**

**cout<<city<<endl;**

**}**

**else{**

**throw demo();**

**}**

**}**

**catch(demo e){**

**cout<<"Enter valid city"<<endl;**

**}**

**try{**

**if(vehical=="fourwheeler"){**

**cout<<vehical<<endl;**

**}**

**else{**

**throw d();**

**}**

**}**

**catch(d e){**

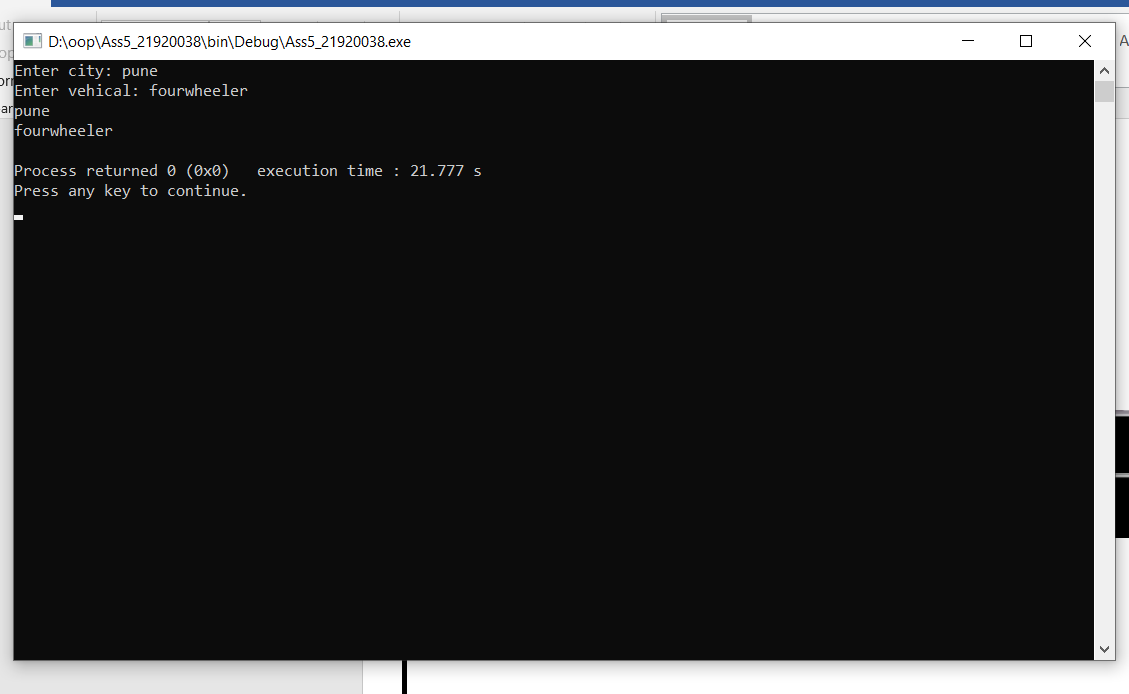
**cout<<"Enter valid vehical"<<endl;**

**}**

**return 0;**

**}**

**Output:-**

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