**Name – Ashish Bhangale**

**Class – FYMCA**

**Division – A, Batch- A1**

**Roll No- 07**

**Subject – Object Oriented Programming.**

**Assignment No – 1**

**Assignment Title -** Create a class named weather report that holds a daily weather report with data members day\_of\_month, hightemp, lowtemp,a mount\_rain and amount\_snow. Use different types of constructors to initialize the objects. Also include a function that prompts the user and sets values for each field so that you can override the default values. Write a menu driven program in C++ with options to enter data and generate monthly report that displays average of each attribute.

**Input –**

#include<iostream>

using namespace std;

class Weather

{

private:

int day,hightemp,lowtemp,rain,snow;

public:

Weather()

{

day=0;

hightemp=0;

lowtemp=0;

rain=0;

snow=0;

}

Weather(int a,int b,int c,int d,int e)

{

day=a;

hightemp=b;

lowtemp=c;

rain=d;

snow=e;

}

Weather(Weather &w)

{

day=w.day;

hightemp=w.hightemp;

lowtemp=w.lowtemp;

rain=w.rain;

snow=w.snow;

}

void accept()

{

cout<<"\nEnter the date of month:";

cin>>day;

cout<<"Enter high temperature:";

cin>>hightemp;

cout<<"Enter low temperature:";

cin>>lowtemp;

cout<<"Enter the rain of day:";

cin>>rain;

cout<<"Enter the snow of day:";

cin>>snow;

}

void display()

{

cout<<"\n"<<day<<"\t"<<hightemp<<"\t"<<lowtemp<<"\t"<<rain<<"\t"<<snow;

}

void average(Weather w2[31],int n)

{

int sumhightemp=0,sumlowtemp=0,sumrain=0,sumsnow=0;

int alowtemp,ahightemp,arain,asnow;

for( int i=0;i<n;i++)

{

sumhightemp=sumhightemp+w2[i].hightemp;

sumlowtemp=sumlowtemp+w2[i].lowtemp;

sumrain=sumrain+w2[i].rain;

sumsnow=sumsnow+w2[i].snow;

}

alowtemp=sumlowtemp/n;

ahightemp=sumhightemp/n;

arain=sumrain/n;

asnow=sumsnow/n;

cout<<"\nAverage of:";

cout<<"Rain:"<<arain;

cout<<"\nAverage of Snow:"<<asnow;

cout<<"\nAverage of High temp:"<<ahightemp;

cout<<"\nAverage of Low temp:"<<alowtemp;

}

};

int main()

{

int ch,n=0,i;

Weather w1();

Weather w2[31];

Weather w3;

do

{

cout<<"\n1.Accept"<<"\n2.Display"<<"\n3.Average"<<"\n4.EXIT";

cout<<"\nEnter choice:";

cin>>ch;

switch(ch)

{

case 1:

cout<<"\nEnter the number of days";

cin>>n;

cout<<"\nEnter the data:";

for(i=0;i<n;i++)

{

w2[i].accept();

}

break;

case 2:

cout<<"\nDay"<<"\t"<<"Htem"<<"\t"<<"Ltem"<<"\t"<<"Rain"<<"\t"<<"Snow";

for(i=0;i<n;i++)

{

w2[i].display();

}

break;

case 3:

w3.average(w2,n);

break;

}

}

while(ch!=3);

return 0;

}

Output-

