

Question 2 solution

```
int tickets;

double price;

cout<<" enter number of tickets"<<endl;

cin>>tickets;

if (tickets > 7 && tickets<= 14 )

    price = 10.75;

else

    price = 15;

if ( tickets > 14 )

    cout<<" The price is: " << tickets * price * 0.9<<endl;

else

    cout<<" The price is: " << tickets * price<<endl;
```

Question 3 solution

```
int day, month, year;

cout<<" enter a day"<<endl;

cin>>day;

cout<<" enter month"<<endl;

cin>>month;

cout<<" enter year"<<endl;

cin>>year;

//variable to check validity of the day

int valid =0;

if (day> 0 && month>0 && month <13 &&day<32 && year>0){

    valid =1;
```

```

//other months dont have the 31 st
if((month==4 || month==2 || month==6 || month==9 || month==11) && day>30 ){
    valid =0;
}

//date invalid if its not a leap year and february but the date is greater than 28
else if((month==2 && day>29 )&& !( year%400==0 || (year%100!=0&& year%4==0)) ){
    valid=0;
}

//also february date cant be greater than 29
else if (month==2 && day>29 ){
    valid=0;
}
}

else{
    valid =0;
}

if (valid ==1){
    cout<<"valid date"<<endl;
}
else{
    cout<<"invalid date"<<endl;
}
}

```