```cpp
#include<stdio.h>
#include<bits/stdc++.h>
#include<stdlib.h>
#include<string.h>
#include<conio.h>
#include<windows.h>
#include<time.h>
#include<iomanip>
////#include<ctype.h>
////#define max 50
using namespace std;
void intro();
void editsalary(int);
void gotoXY(int X,int Y)
{
COORD pos = {X,Y};
SetConsoleCursorPosition(GetStdHandle(STD_OUTPUT_HANDLE),pos);
}
class emp
{
public:
string name;
string id;
string address;
int age;
int experience;
int salary,contact,grade,hour,sal;
int tax;
int MealAllowance;
int TransportAllowance;
int MedicalAllowance;
int grosspay;
};
int total=0;
emp e[100];
void empdata()
{
int sal,grade,h,user=0,bonus,MealA,MedicalA,TransportA,TAX;
cout<<"How many employees data do you want to enter??"<<endl;
cin>>user;
for(int i=total; i<total+user; i++)
 {
cout<<"Enter data of employee "<<i+1<<endl<<endl;
cout<<"Enter employee name: ";
getline(cin>> std::ws,e[i].name);
cout<<"Enter id: ";
cin>>e[i].id;
cout<<"Enter address: ";
getline(cin>> std::ws,e[i].address);
cout<<"Enter contact: ";
cin>>e[i].contact;
cout<<"Enter age : ";
cin>>e[i].age;
cout<<"Years of experience : ";
cin>>e[i].experience;
cout<<"Enter Working Hours : ";
cin>>e[i].hour;
cout << "Enter Employee Grade: ";
cin >> e[i].grade;
TAX = 0.04 * sal;
MealA = 300;
MedicalA = 300;
TransportA = 300;
if(grade > 7)
 {
bonus = sal* 50.0/100.0;
```

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67  sal = sal + bonus;
68   }
69  else
70  {
71  bonus = sal * 25.0/100.0;
72  sal = sal + bonus;
73   }
74  e[i].salary = sal;
75  e[i].tax=TAX;
76  e[i].MealAllowance = MealA;
77  e[i].MedicalAllowance = MedicalA;
78  e[i].TransportAllowance = TransportA;
79  e[i].grosspay = (sal+MealA+MedicalA+TransportA)-TAX;
80  getch();
81   }
82  total=total+user;
83  }
84  void show()
85  {
86  if(total!=0)
87   {
88  for(int i=0; i<total; i++)
89   {
90  cout<<"Data of employee "<<i+1<<endl;
91  cout<<"Name: "<<e[i].name<<endl;
92  cout<<"ID: "<<e[i].id<<endl;
93  cout<<"Address: "<<e[i].address<<endl;
94  cout<<"Contact: "<<e[i].contact<<endl;
95  cout<<"Working Hours: "<<e[i].hour<<endl;
96  cout<<"Employee Grade : "<<e[i].grade<<endl;
97  cout<<"Employee age : "<<e[i].age<<endl;
98  cout<<"Years of experience :"<<e[i].experience<<endl;
99  //cout<<"Salary: "<<e[i].salary<<endl;
100 cout<<"Total Gross Pay : "<<e[i].grosspay<<endl;
101  }
102  }
103 else
104 {
105 cout<<"No data is entered"<<endl;
106  }
107 }
108 void search()
109 {
110 if(total!=0)
111  {
112 string id;
113 cout<<"Enter id of employee which you want to search"<<endl;
114 cin>>id;
115 for(int i=0; i<total; i++)
116  {
117 if(e[i].id==id)
118  {
119 cout<<"Data of employee "<<i+1<<endl;
120 cout<<"Name: "<<e[i].name<<endl;
121 cout<<"ID: "<<e[i].id<<endl;
122 cout<<"Address: "<<e[i].address<<endl;
123 cout<<"Contact: "<<e[i].contact<<endl;
124 cout <<"Grade: "<<e[i].grade<<endl;
125 cout<<"Salary: "<<e[i].grosspay<<endl;
126 break;
127  }
128 if(i==total-1)
129  {
130 cout<<"No such record found"<<endl;
131  }
132  }
```

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133        }
134    else
135    {
136    cout<<"No data is entered"<<endl;
137        }
138    }
139    void update()
140    {
141    if(total!=0)
142        {
143    string id;
144    cout<<"Enter id of employee which you want to update"<<endl;
145    cin>>id;
146    for(int i=0; i<total; i++)
147        {
148    if(e[i].id==id)
149        {
150    cout<<"Old data of employee "<<i+1<<endl;
151    cout<<"Name: "<<e[i].name<<endl;
152    cout<<"ID: "<<e[i].id<<endl;
153    cout<<"Address: "<<e[i].address<<endl;
154    cout<<"Contact: "<<e[i].contact<<endl;
155    cout<<"Salary: "<<e[i].salary<<endl;
156    cout<<"\nEnter new data"<<endl;
157    cout<<"Enter employee name: ";
158    getline(cin>> std::ws,e[i].name);
159    cout<<"Enter id: ";
160    cin>>e[i].id;
161    cout<<"Enter address: ";
162    getline(cin>> std::ws,e[i].address);
163    cout<<"Enter contact: ";
164    cin>>e[i].contact;
165    cout<<"Enter Grade: ";
166    cin>>e[i].grade;
167    break;
168        }
169    if(i==total-1)
170        {
171    cout<<"No such record found"<<endl;
172        }
173        }
174        }
175    else
176    {
177    cout<<"No data is entered"<<endl;
178        }
179    }
180    void editsalary()
181    {
182    int i,sal,grade,bonus,h;
183    gotoXY(10,18);
184    cout<<"Enter new Salary ";
185    cin>>sal;
186    cout<<"Enter Working Hours : ";
187    cin>>h;
188    sal = h*300;
189    e[i].hour = h;
190    cout << "Enter Employee Grade: ";
191    cin >> grade;
192    if(grade > 15)
193        {
194    bonus = sal* 50.0/100.0;
195    sal = sal + bonus;
196        }
197    else
198    {
```

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199     bonus = sal * 25.0/100.0;
200     sal = sal + bonus;
201      }
202     cout<< "New salary"<<endl;
203     e[i].salary=sal;
204     // e[i].sal = salary;
205     cin >> e[i].salary;
206     }
207     void del()
208     {
209     if(total!=0)
210      {
211     int press;
212     cout<<"Press 1 to delete specific record"<<endl;
213     cout<<"Press 2 to delete full record"<<endl;
214     cin>>press;
215     if(press==1)
216      {
217     string id;
218     cout<<"Enter id of employee which you want to delete"<<endl;
219     cin>>id;
220     for(int i=0; i<total; i++)
221      {
222     if(e[i].id==id)
223      {
224     e[i].name=e[i+1].name;
225     e[i].id=e[i+1].id;
226     e[i].address=e[i+1].address;
227     e[i].contact=e[i+1].contact;
228     e[i].salary=e[i+1].salary;
229     total--;
230     cout<<"Your required record is deleted"<<endl;
231     break;
232      }
233     if(i==total-1)
234      {
235     cout<<"No such record found"<<endl;
236      }
237      }
238      }
239     else if(press==2)
240      {
241     total=0;
242     cout<<"All record is deleted"<<endl;
243      }
244     else
245     {
246     cout<<"Invalid Input"<<endl;
247      }
248      }
249     else
250     {
251     cout<<"No data is entered"<<endl;
252      }
253     }
254     void intro()
255     {
256     gotoXY(27,4);
257     printf("EMPLOYEE MANAGEMENT SYSTEM");
258     gotoXY(25,5);
259     for(int i=0; i<29; i++) printf("%c",196);
260     gotoXY(20,8);
261     printf("Designed and Programmed by:");
262     gotoXY(20,9);
263     for(int i=0; i<29; i++) printf("%c",196);
264     gotoXY(20,11);
```

```cpp
265  printf("SHERLOCK\n");
266  gotoXY(20,13);
267  printf("Department of Computer Science and Engineering\n");
268  gotoXY(20,15);
269  printf("Submitted To: Muhammad Nazim Uddin SIR\n");
270  gotoXY(24,20);
271  printf("Press Any key to continue...");
272  getch();
273  }
274  int main()
275  {
276  intro();
277  system("COLOR 0e");
278  system("cls");
279  SetConsoleCP(437);
280  SetConsoleOutputCP(437);
281  int bar1 = 177,bar2 = 219;
282  cout << "\n\n\n\t\t\tloading....";
283  cout << "\n\n\n\t\t\t\t";
284  for(int i = 0; i < 25; i++)
285  cout << (char)bar1;
286  cout <<"\r";
287  cout <<"\t\t\t\t";
288  for(int i = 0; i < 25; i++)
289   {
290  cout << (char)bar2;
291  Sleep(150);
292   }
293  cout <<"\n\t\t\t\t" << (char)1 << ":";
294  system("Pause");
295  cout<<"\n\n\t\tEmployee Management System"<<endl;
296  string username,password;
297  cout<<"\n\n\n\t\t******Signup******"<<endl;
298  cout<<"\t\tEnter new username: ";
299  cin>>username;
300  cout<<"\t\tEnter new password: ";
301  cin>>password;
302  cout<<"\t\tYour new id is creating please wait";
303  for(int i=0; i<6; i++)
304   {
305  cout<<".";
306  Sleep(500);
307   }
308  cout<<"\n\t\tYour id created successfully";
309  Sleep(2000);
310  start:
311  system("CLS");
312  string usrn,pswd;
313  cout<<"\n\n\t\tEmployee Management System"<<endl;
314  cout<<"\n\n\n\t\t LOGIN"<<endl;
315  cout<<"\t\tEnter username: ";
316  cin>>usrn;
317  cout<<"\t\tEnter password: ";
318  cin>>pswd;
319  if(usrn==username&&pswd==password)
320   {
321  system("CLS");
322  char ch;
323  while(1)
324   {
325  cout<<"\n\nPress 1 to enter data"<<endl;
326  cout<<"Press 2 to show data"<<endl;
327  cout<<"Press 3 to search data"<<endl;
328  cout<<"Press 4 to update data"<<endl;
329  cout<<"Press 5 to delete data"<<endl;
330  cout<<"Press 6 to logout"<<endl;
```

```cpp
cout<<"Press 7 to Edit Salary"<<endl;
cout<<"Press 8 to Exit"<<endl;
ch=getch();
system("CLS");
switch(ch)
  {
case '1':
empdata();
break;
case '2':
show();
break;
case '3':
search();
break;
case '4':
update();
break;
case '5':
del();
break;
case '6':
goto start;
break;
case '7':
editsalary();
break;
case '8':
exit(0);
break;
default:
cout<<"\aInvalid Input"<<endl;
break;
  }
  }
  }
else if(usrn!=username)
  {
cout<<"\t\t\aInvalid username please try again";
Sleep(3000);
goto start;
  }
else if(pswd!=password)
  {
cout<<"\t\t\aInvalid password please try again";
Sleep(3000);
goto start;
  }
else
{
cout<<"\t\t\aInvalid username and password";
Sleep(3000);
goto start;
  }
  }
```