

## 7-1 (STRUCTS)

```
# include <stdio.h>
# include <string.h>
```

```
Struct book {
    int book_id;
    Char title [50];
    Char Author [50];
    float price;
}
```

```
void printbook ( struct book b ) {
    printf (" Book id : %d ", b.book_id );
    printf (" Author : %s ", b.Author );
    printf (" Price %.2f ", b.Price );
}
```

```
int main () {
```

```
    Struct book mybook;
    mybook . book_id = 101;
    strcpy ( mybook . title , "C programming" );
    strcpy ( mybook . Author , " Dennis Ritchie" );
    mybook . price = 29.99;
```

```
    print book details (mybook );
    return 0;
```

```
}
```

File Edit Selection View Go Run Terminal Help ← → EXP

EXPLORER ... C exp7-1.c x C exp7-2.c C exp7-3.c ● C exp9-1.c C exp9-2.c C exp9-3.c

EXP

C exp3-2-3.a.c  
C exp3-2-3.b.c  
C exp3-2-3.c  
C exp3-2-4.c  
C exp3-2-5.c  
C exp4-1.c  
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C exp4-4.c  
C exp5-1.c  
C exp5-2.c  
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C exp7-1.c  
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C exp7-3.c  
C exp8-1.c  
C exp8-2.c  
C exp8-3.c  
C exp9-1.c  
C exp9-2.c  
C exp9-3.c  
C labviva.c  
C viva.c

OUTLINE  
TIMELINE

```
1 #include <stdio.h>
2
3 typedef struct {
4     char name[50];
5     float basicPay;
6 } Employee;
7
8 int main() {
9     Employee employees[100];
10    float DA, grossSalary;
11    int i;
12
13    for (i = 0; i < 100; i++) {
14        printf("Enter name of employee %d: ", i+1);
15        scanf("%s", employees[i].name);
16        printf("Enter basic pay of employee %d: ", i+1);
17        scanf("%f", &employees[i].basicPay);
18    }
19
20    printf("\nEmployee Name\tGross Salary\n");
21    for (i = 0; i < 100; i++) {
22        DA = 0.52 * employees[i].basicPay;
23        grossSalary = employees[i].basicPay + DA;
24        printf("%s\t\t%.2f\n", employees[i].name, grossSalary);
25    }
26    return 0;
27 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

ps C:\Users\Yash\EXP>

Ln 28, Col 1 Spaces:4 UTF-8 CRLF { } C Win32

powerShell + ×

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7-2

```
#include <stdio.h>
#include <string.h>
```

Union Address {

char name[50] ;

char name - address [100] ;

char hostel - address [100] ;

char city [30] ;

char state [30] ;

char zip [30] ;

}

int main () {

Union address present - address ;

strcpy (present - address . hostel - address ,

"Room 101 , Hostel building A" );

printf ("Present Address : %s" ) ;

present - Address . hostel - address

return 0 ;

3

File Edit Selection View Go Run Terminal Help ← → EXP

EXPLORER ... exp7-1.c exp7-2.c exp7-3.c exp9-1.c exp9-2.c exp9-3.c

EXP

exp3-2-3.a.c exp3-2-3.b.c exp3-2-3.c exp3-2-4.c exp3-2-5.c exp4-1.c exp4-2.c exp4-3.c exp4-4.c exp5-1.c exp5-2.c exp5-3.c exp5-4.c exp6-1.c exp6-2.c exp6-3.c exp6-4.c exp6-5.c exp7-1.c exp7-2.c exp7-3.c exp8-1.c exp8-2.c exp8-3.c exp9-1.c exp9-2.c exp9-3.c labviva.c viva.c

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

ps C:\Users\Yash\EXP>

Ln 22, Col 1 Spaces:4 UTF-8 CRLF ⌂ C Win32

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```
#include <stdio.h>

typedef struct {
    int book_id;
    char title[100];
    char author[50];
    float price;
} Book;

void printBookDetails(Book b) {
    printf("Book ID: %d\n", b.book_id);
    printf("Title: %s\n", b.title);
    printf("Author: %s\n", b.author);
    printf("Price: %.2f\n", b.price);
}

int main() {
    Book book1 = {101, "C Programming", "Brian Kernighan", 350.50};
    printBookDetails(book1);
    return 0;
}
```

## Experiment 8 (Pointers)

8-1

#include &lt;stdio.h&gt;

```
int main () {  
    int a = 10;  
    float b = 5.5;  
    char c = 'Z';
```

```
    int *ptr_int = &a;
```

```
    float *ptr_float = &b;
```

```
    char *ptr_char = &c;
```

```
    printf ("Address stored in ptr_int : %p\n",  
           (void *)ptr_int);
```

```
    printf ("Address stored in ptr_char : %p\n",  
           (void *)ptr_char);
```

```
    printf ("Value of b directly : %f\n", b);
```

```
    printf ("Value of c directly : %c\n", c);
```

```
    return 0;
```

```
}
```

8.3

```
#include <iostream.h>
using namespace std;
```

```
void modifying_values (int* ptr1 , int* ptr2 ) {
    *ptr1 = 10;
    *ptr2 = 20;
}
```

```
int main () {
    int a= 5 , b=15;
    cout<<
    a = " << a << ";
    b = " << b << endl ,
    }
```

```
modify values (&a,&b);
    cout <<
    a = " << a << "
    b = " << b << endl ;
```

```
return 0;
}
```

# Experiment 9 (file Handling)

9-1

```
# include <iostream>
```

```
# include <fstream>
```

```
using namespace std;
```

```
int main() {
```

```
ofstream
```

```
outfile ("example.txt");
```

```
if (outfile.is_open()) {
```

```
outfile <<
```

```
outfile.close();
```

```
cout <<
```

```
<< endl;
```

```
} else {
```

```
cerr <<
```

```
<< endl;
```

```
return 1;
```

```
}
```

```
while (infile.get (ch)) {
```

```
cout << ch;
```

```
infile.close();
```

```
return 1;
```

```
}
```

```
return 0
```

```
}
```



Q-2

```
#include <iostream>
```

```
#include <fstream>
```

using namespace std;

```
int main () {
```

```
char ch;
```

```
ifstream
```

```
infile ("example.txt");
```

```
if (infile)
```

```
cer <<
```

```
<< endl;
```

```
return 1;
```

```
}
```

```
while (infile.get(ch)) {
```

```
cout << ch;
```

```
}
```

```
infile.close();
```

```
return 0;
```

```
}
```

