Lab session 8

Part B/section A

2.

```
#include <stdio.h>
#include <stdlib.h>
int main() {
int marks[10];
int sum = 0, max = 0, min = 100;
printf("Enter marks of 10 students:\n");
for (int i = 0; i < 10; i++) {
printf("Enter marks for student %d: ", i + 1);
scanf("%d", &marks[i]);
sum += marks[i];
if (marks[i] > max) {
max = marks[i];
}
if (marks[i] < min) {
min = marks[i];
}
}
double average = (double)sum / 10;
printf("Maximum marks: %d\n", max);
printf("Minimum marks: %d\n", min);
printf("Average marks: %.2f\n",
average);
return 0;
}
```

3.

```
#include <stdio.h>
#include <stdlib.h>
int main() {
float prices[10];
float sum = 0;
int count = 0;
printf("Enter the prices of 10 items:\n");
for (int i = 0; i < 10; i++) {
printf("Enter the price for item %d: ", i + 1);
scanf("%f", &prices[i]);
sum += prices[i];
if (prices[i] > 200) {
```

```
count++;
}
}
float average = sum / 10;
printf("Average value of an item: %.2f\n", average);
printf("Number of items with price greater than 200: %d\n", c
ount);
return 0;
}
```

4.

```
#include <stdio.h>
#include <stdlib.h>
int main() {
int employeeNo;
float basicSalary;
int count = 0;
printf("Enter employee numbers and basic salaries (Enter -999 as
employee number to stop):\n");
while (1) {
printf("Enter employee number: ");
scanf("%d", &employeeNo);
if (employeeNo == -999) {
break;
}
printf("Enter basic salary: ");
scanf("%f", &basicSalary);
if (basicSalary >= 5000) {
count++;
}
}
printf("Number of employees with basic salary >= 5000: %d\n",
count);
return 0;
}
```

5.

```
#include <stdio.h>
#include <stdlib.h>
int main() {
int employeeNo;
float hoursWorked;
float overtimePayment;
```

```
int count = 0;
int totalEmployees = 0;
printf("Enter employee number and hours worked (Enter -999 as
employee number to stop):\n");
while (1) {
printf("Enter employee number: ");
scanf("%d", &employeeNo);
if (employeeNo == -999) {
break;
}
printf("Enter hours worked: ");
scanf("%f", &hoursWorked);
float overtimeRate = 150;
if (hoursWorked > 40) {
overtimeRate += (hoursWorked - 40) * 200;
}
overtimePayment = overtimeRate * hoursWorked;
printf("Employee number: %d\n", employeeNo);
printf("Overtime Payment: %.2f\n", overtimePayment);
if (overtimePayment > 4000) {
count++;
}
totalEmployees++;
}
float percentage = (float)count / totalEmployees * 100;
printf("Percentage of employees whose overtime payment exceeds Rs.
4000:
%.2f%%\n", percentage);
return 0;
}
```