Lab session 4

P3

1

```
#include <stdio.h>
#include <stdlib.h>
int main() {
int num1, num2;
printf("Enter the first number: ");
scanf("%d", &num1);
printf("Enter the second number: ");
scanf("%d", &num2);
if (num1 > num2) {
printf("The highest number is: %d\n", num1);
} else if (num2 > num1) {
printf("The highest number is: %d\n", num2);
} else {
printf("Both numbers are equal.\n");
}
return 0;
}
```

2.

```
#include <stdio.h>
#include <stdlib.h>
int main() {
int num1, num2, num3;
printf("Enter the first number: ");
scanf("%d", &num1);
printf("Enter the second number: ");
scanf("%d", &num2);
printf("Enter the third number: ");
scanf("%d", &num3);
int largest = num1;
int smallest = num1;
if (num2 > largest) {
largest = num2;
}
if (num3 > largest) {
largest = num3;
}
if (num2 < smallest) {
smallest = num2;
}
if (num3 < smallest) {
```

```
smallest = num3;
}
if (num3 < smallest) {
smallest = num3;
}
printf("The largest number is: %d\n", largest);
printf("The smallest number is: %d\n",smallest);

return 0;
}
```

3.

```
#include <stdio.h>
#include <stdlib.h>
int main() {
char name[50];
float basicSalary, newSalary, increment;
printf("Enter employee name: ");
scanf("%s", name);
printf("Enter basic salary: ");
scanf("%f", &basicSalary);
if (basicSalary < 5000) {
increment = 0.05 * basicSalary;
}
 else if (basicSalary >= 5000 && basicSalary < 10000) {
increment = 0.1 * basicSalary;
}
else {
increment = 0.15 * basicSalary;
}
newSalary = basicSalary + increment;
printf("\nEmployee Name: %s\n", name);
printf("New Salary: %.2f\n", newSalary);

return 0;
}
```

4.

```
#include <stdio.h>
#include <stdlib.h>
int main() {
float radius, diameter, circumference, area;
const float pi = 3.14159;
printf("Enter the radius of the circle: ");
scanf("%f", &radius);
diameter = 2 * radius;
circumference = 2 * pi * radius;
```

```
area = pi * radius * radius;
printf("Diameter: %.2f\n", diameter);
printf("Circumference: %.2f\n", circumference);
printf("Area: %.2f\n", area);
return 0;
}
```

5.

```
#include <stdio.h>
#include <stdlib.h>
int main() {
int num1, num2;
printf("Enter the first integer: ");
scanf("%d", &num1);
printf("Enter the second integer: ");
scanf("%d", &num2);
if (num1 % num2 == 0) {
printf("%d is a multiple of %d\n", num1, num2);
} else {
printf("%d is not a multiple of %d\n", num1, num2);
}
return 0;
}
```

6.

```
#include <stdio.h>
#include <stdlib.h>
int main() {
char uppercase_letters[] = "ABC";
char lowercase_letters[] = "abc";
char digits[] = "012";
char special_symbols[] = "$*+/";
char blank_character = ' ';
printf("Uppercase letters:\n");
for (int i = 0; i < sizeof(uppercase_letters) - 1; i++) {
printf("%c: %d\n", uppercase_letters[i], (int)uppercase_letters[i]);
}
printf("\nLowercase letters:\n");
for (int i = 0; i < sizeof(lowercase_letters) - 1; i++) {
printf("%c: %d\n", lowercase_letters[i], (int)lowercase_letters[i]);
}
printf("\nDigits:\n");
for (int i = 0; i < sizeof(digits) - 1; i++) {
printf("%c: %d\n", digits[i], (int)digits[i]);
}
printf("\nSpecial symbols:\n");
for (int i = 0; i < sizeof(special_symbols) - 1; i++) {
```

```
printf("%c: %d\n", special_symbols[i], (int)special_symbols[i]);
}
```