**C program using switch-case** :

#include <stdio.h>

int main() {

int nums[5], i, choice;

int sum = 0, max, min;

printf("Enter 5 numbers:\n");

for (i = 0; i < 5; i++) {

printf("Number %d: ", i + 1);

scanf("%d", &nums[i]);

}

do {

printf("\nMenu:\n");

printf("1. Display numbers\n");

printf("2. Find sum of numbers\n");

printf("3. Find maximum number\n");

printf("4. Find minimum number\n");

printf("5. Exit\n");

printf("Enter your choice: ");

scanf("%d", &choice);

switch (choice) {

case 1:

printf("Numbers entered: ");

for (i = 0; i < 5; i++) {

printf("%d ", nums[i]);

}

printf("\n");

break;

case 2:

sum = 0;

for (i = 0; i < 5; i++) {

sum += nums[i];

}

printf("Sum of numbers = %d\n", sum);

break;

case 3:

max = nums[0];

for (i = 1; i < 5; i++) {

if (nums[i] > max)

max = nums[i];

}

printf("Maximum number = %d\n", max);

break;

case 4:

min = nums[0];

for (i = 1; i < 5; i++) {

if (nums[i] < min)

min = nums[i];

}

printf("Minimum number = %d\n", min);

break;

case 5:

printf("Exiting program. Goodbye!\n");

break;

default:

printf("Invalid choice. Please try again.\n");

}

} while (choice != 5);

return 0;

}

**Output:**

Enter 5 numbers:

Number 1: 6

Number 2: 26

Number 3: 17

Number 4: 24

Number 5: 26

Menu:

1. Display numbers

2. Find sum of numbers

3. Find maximum number

4. Find minimum number

5. Exit

Enter your choice: 2

Sum of numbers = 99

Menu:

1. Display numbers

2. Find sum of numbers

3. Find maximum number

4. Find minimum number

5. Exit

Enter your choice: 5

Exiting program. Goodbye!

=== Code Execution Successful ===