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Tutorial 05

Switch case

#include <stdio.h>

int main () {

float num1, num2;

int choice;

printf("Enter two numbers: ");

scanf("%f %f", &num1, &num2);

printf("1. +\n");

printf("2. -\n");

printf("3. \*\n");

printf("4. /\n");

printf("Enter your choice: ");

scanf("%d", &choice);

switch (choice) {

case 1:

printf("%.2f + %.2f = %.2f", num1, num2, num1 + num2);

break;

case 2:

printf("%.2f - %.2f = %.2f", num1, num2, num1 - num2);

break;

case 3:

printf("%.2f \* %.2f = %.2f", num1, num2, num1 \* num2);

break;

case 4:

if (num2 != 0) {

printf("%.2f / %.2f = %.2f\n", num1, num2, num1 / num2);

}

else {

printf("Can't divide by zero");

}

break;

}

return 0;

}

While loop

* #include <stdio.h>

int main () {

int num, count = 0;

int even\_count = 0, odd\_count = 0;

printf("Enter 10 numbers\n");

while (count < 10) {

printf ("Enter %d number: ", count + 1);

scanf ("%d", &num);

if (num % 2 == 0) {

even\_count++;

}

else {

odd\_count++;

}

count++;

}

printf ("Even count: %d\n", even\_count);

printf ("Odd count: %d\n", odd\_count);

return 0;

}

* #include <stdio.h>

int main () {

int num;

int even\_count = 0, odd\_count = 0;

printf("Enter a series of numbers (Terminate with -99)\n");

while (1) {

printf ("Enter number: ");

scanf ("%d", &num);

if (num == -99) {

break;

}

if (num % 2 == 0) {

even\_count++;

}

else {

odd\_count++;

}

}

printf ("Even count: %d\n", even\_count);

printf ("Odd count: %d\n", odd\_count);

return 0;

}

Do while loop

* #include <stdio.h>

int main () {

int num, i = 0;

int even\_count = 0, odd\_count = 0;

do {

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

scanf ("%d", &num);

if (num % 2 == 0) {

even\_count++;

}

else {

odd\_count++;

}

i++;

} while (i < 10);

printf ("Even count: %d\n", even\_count);

printf ("Odd count: %d\n", odd\_count);

return 0;

}

* #include <stdio.h>

int main () {

int num;

int even\_count = 0, odd\_count = 0;

printf("Enter a series of numbers (Terminate with -99)\n");

do {

printf ("Enter numbers: ");

scanf ("%d", &num);

if (num != -99) {

if (num % 2 == 0) {

even\_count++;

}

else {

odd\_count++;

}

}

else {

break;

}

} while (num != -99);

printf ("Even count: %d\n", even\_count);

printf ("Odd count: %d\n", odd\_count);

return 0;

}

For loop

* #include <stdio.h>

int main () {

int sum = 0;

float avg;

for (int i = 1; i <= 10; i++) {

printf("Enter %d number: ", i);

scanf("%d", &i);

sum += i;

}

avg = sum / 10;

printf("Average: %.2f", avg);

return 0;

}

* #include <stdio.h>

int main () {

int rows;

printf("Enter rows number: ");

scanf("%d", &rows);

for (int i = 1; i <= rows; ++i) {

for (int j = 1; j <= i; ++j) {

printf("\*");

}

printf("\n");

}

return 0;

}