**5. Write a program to print the values of weekdays using enum data types.**

#include <stdio.h>

enum weekdays {mon=1, Tues, Wed, Thrus, Fri, Sat, Sun};// enum refers to enum data types

int main()

{

    char day=mon;

    printf("%d", Thrus);

    return 0;

}

**Output:**

**4**

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**6. write a program to understand type conversion(implicit and explicit) concepts by performing addition and subtraction using int , float , and char data types:**

#include <stdio.h>

int main()

{

// Implicit

char Impli = 'a';

int conv = 10;

conv = conv+Impli;

printf(" \nImplicit conversion of char into ASCII value: %d\n",conv);

// explicit coversion

int a,c;

float b;

printf("enter a number:");

scanf("%d", &a);

printf("\nenter second number");

scanf("%f",&b);

c=a+b;

printf("\nsum of the numbers (explicit conversion): %d", c);

return 0;

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Output:**

Implicit conversion of char into ASCII value: 107

enter a number:56

enter second number: 2.564

sum of the numbers (explicit conversion): 58

**7. write a program to swap values by call by value**

#include <stdio.h>

int swap (int a,int b) {

int temp=a;

a=b;

b=temp;

printf("\nvalues of a and b after swapping inside swap function:%d and %d", a,b);

}

int main()

{

int a=10;

int b=30;

printf("\nvalues of a and b before swapping :%d and %d", a,b);

swap(a,b);

printf("\nvalues of a and b after swapping inside inside function:%d and %d", a,b);

return 0;

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Output:**

values of a and b before swapping :10 and 30

values of a and b after swapping inside swap function:30 and 10

values of a and b after swapping inside inside function:10 and 30

**8.write a program to swap values by call by reference**

#include <stdio.h>

int swap (int \*p1,int \*p2) {

int temp=\*p1;

\*p1=\*p2;

\*p2=temp;

printf("\nvalues of a and b after swapping inside swap function:%d and %d", \*p1,\*p2);

}

int main()

{

int a=10;

int b=30;

printf("\nvalues of a and b before swapping :%d and %d", a,b);

swap(&a,&b);

printf("\nvalues of a and b after swapping inside inside function:%d and %d", a,b);

return 0;

}

**Output:**

values of a and b before swapping :10 and 30

values of a and b after swapping inside swap function:30 and 10

values of a and b after swapping inside main function:30 and 10

**9. write a program for fibonacci series where first two numbers are given**

#include <stdio.h>

int main()

{

int first =0;

int second =1;

int nextTerm =1;

int n;

printf("enter the value where it will end: ");

scanf("%d",&n);

printf("\n %d \t %d",first,second);

for(int i=0;i<=n;i++) {

printf("\t %d \t", nextTerm);

first =second;

second = nextTerm;

nextTerm = second + first;

}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**Output:**

**enter the value where it will end: 4**

**0 1 1 2 3 5 8**

**15. write a program for calculating factorial of a number**

#include <stdio.h>

int main()

{

int n;

int fact =1;

printf("enter a number: ");

scanf("%d",&n);

for(int i=n;i>=1;i--)

{

fact =fact\*i;

}

printf("factorial of %d is : %d", n,fact);

}

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**Output:**

**enter a number: 11**

**factorial of 11 is : 39916800**

**16. Write a program for printing half pyramid**

#include <stdio.h>

int main()

{

int n;

printf("enter number of rows: ");

scanf("%d",&n);

for(int i=0;i<=n;i++)

{

for (int j=0;j<=i;j++) {

printf("\*");

}

printf("\n");

}

}

**Output:**

**\***

**\*\***

**\*\*\***

**\*\*\*\***

**\*\*\*\*\***

**\*\*\*\*\*\***

**17. write a program for counting number of digit in a integer**

#include <stdio.h>

int main()

{

int n;

printf("enter a integer: ");

scanf("%d",&n);

int temp=n;

int count=0;

while (n) {

n=n/10;

count = count+1;

}

printf("number of digit in %d is: %d",temp,count);

}

**Output:**

**enter a integer: 45698712**

**number of digit in 45698712 is: 8**

**18.** **Write a program for counting number of digit in a integer**

#include <stdio.h>

#include <math.h>

int main()

{

int n;

printf("enter a integer ");

scanf("%d",&n);

int temp=n;

int original=n;

int sum =0;

int count=0;

while (temp) {

temp=temp/10;

count = count+1;

}

while (n) {

temp=n%10;

sum =sum + pow(temp,count);

n=n/10;

}

if(sum==original){

printf("the number you entered is armstrong: %d",original);

}

else {

printf("the number you entered is not armstrong");

}

}

**Output:**

**enter a integer 45687**

**the number you entered is not Armstrong**

**19. write a program a triangle like pattern**

**20. Write a program for checking a palindrome number:**

#include <stdio.h>

#include <math.h>

int main()

{

int n;

printf("enter a integer ");

scanf("%d",&n);

int temp=n;

int original=n;

int sum =0;

int count=0;

while (n) {

temp=n%10;

sum =sum\*10 +temp;

n=n/10;

}

if(sum==original){

printf("the number you entered is palindrome: %d",original);

}

else {

printf("the number you entered is not palindrome");

}

}

**Output:**

**enter a integer 131**

**the number you entered is palindrome: 131**