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MATRIC NO: 18/SCI01/092

DEPARTMENT: COMPUTER SCIENCE

1.

#include <stdio.h>

#include <stdlib.h>

int main(){

int indx = 100;

while (indx >= 1){

printf("%d\n", indx);

indx =indx - 1;

}

return 0;

}

3.

#include

<stdio.h>

int main() {

int n, i, flag = 0;

printf("Enter a positive integer: ");

scanf("%d", &n);

for (i = 2; i <= n / 2; ++i) {

// condition for non-prime

if (n % i == 0) {

flag = 1;

break;

}

}

if (n == 1) {

printf("1 is neither prime nor composite.");

}

else {

if (flag == 0)

printf("%d is a prime number.", n);

else

printf("%d is not a prime number.", n);

}

return 0;

}

4.

#include

<stdio.h>

int main()

{

int c, n, f = 1;

printf("Enter a number to calculate its factorial\n");

scanf("%d", &n);

for (c = 1; c <= n; c++)

f = f \* c;

printf("Factorial of %d = %d\n", n, f);

return 0;

}

5.

#include <stdio.h>

#include <stdlib.h>

int main()

{ int indx = 50;

while (indx <= 1000){

printf("%d\n", indx);

indx =indx + 7;

}

return 0;

}

6.

/\*\*

\* C program to check whether a character is vowel or consonant

\*/

#include <stdio.h>

int main()

{

char ch;

/\* Input character from user \*/

printf("Enter any character: ");

scanf("%c", &ch);

/\* Condition for vowel \*/

if(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u' ||

ch=='A' || ch=='E' || ch=='I' || ch=='O' || ch=='U')

{

printf("'%c' is Vowel.", ch);

}

else if((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z'))

{

/\* Condition for consonant \*/

printf("'%c' is Consonant.", ch);

}

else

{

/\*

\* If it is neither vowel nor consonant

\* then it is not an alphabet.

\*/

printf("'%c' is not an alphabet.", ch);

}

return 0;

}

9.

#include <stdio.h>

int main()

{

int a,b,c,d,e,f,g,h,result;

i

printf("\nInput the first integer: ");

scanf("%d", &a);

if a=0

{exit(0);

}else

printf("\nInput the second integer: ");

scanf("%d", &b);

printf("\nInput the first integer: ");

scanf("%d", &c);

printf("\nInput the first integer: ");

scanf("%d", &d);

printf("\nInput the first integer: ");

scanf("%d", &e);

printf("\nInput the first integer: ");

scanf("%d", &f);

printf("\nInput the first integer: ");

scanf("%d", &g);

printf("\nInput the first integer: ");

scanf("%d", &h);

result =a\*b\*c\*d\*e\*f\*g\*h\*;

printf("Product of the above two integers = %d\n", result);

}

10.

#include<stdio.h>

int main()

{

int count=1,year\_num;

float Rate;

unsigned long CurrentYr;

unsigned long NextYr;

while (count<=1)

{

printf("Enter the initial egret population: ");

scanf("%d",&CurrentYr);

printf("Enter the rate: ");

scanf("%f",&Rate);

printf("Year Population\n");

printf("---- ----------\n");

if ((CurrentYr>0 && CurrentYr<1000000) && (Rate>0 && Rate<4))

{

NextYr = CurrentYr;

for(year\_num=0;year\_num<=25;year\_num++)

{

NextYr = Rate \* NextYr \* (1-NextYr/1000000);

printf("%4d%12d\n",year\_num,NextYr);

}

break;

}

else if ((CurrentYr < 0 || CurrentYr > 1000000) || (Rate<0 || Rate>4))

{

printf("Invalid Input!");

printf("Enter the initial egret population: ");

scanf("%d",&CurrentYr);

printf("Enter the rate: ");

scanf("%f",&Rate);

if ((CurrentYr>0 && CurrentYr<1000000) && (Rate>0 && Rate<4))

{

NextYr = CurrentYr;

for(year\_num=0;year\_num<=25;year\_num++)

{

printf("%4d%12d\n",year\_num,NextYr);

NextYr = Rate \* NextYr \* (1-NextYr/1000000);

}

break;

}

else

{

printf("No more chance ! Bye ! ");

}

}

return 0;

}

}