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Matric No: 18/SCI01/055

CSC206 PRACTICE QUESTION IV

40.(A).#include <stdio.h>

int main()

{

int columns, rows, number;

rows =20;

do{

columns=0;

do{

printf("%d\t ", columns\*100+rows);

}while(columns++ <9);

printf("\n");

}while(rows++ <100);

return 0;

}

(B).#include <stdio.h>

int main()

{

int j;

printf("Print integer number from 20 to 1000 in steps of 3 :\n");

for (j = 1000; j >= 20; j -= 3)

printf("%d ", j);

return 0;

}

41.(A).#include <stdio.h>

int main()

{

int i;

printf("Print a list of numbers from 1 to 3000 :\n");

for (i = 1; i <= 3000; i++)

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

return 0;

}

(B).#include <stdio.h>

int main()

{

int i;

printf("Print a comma-separated list of numbers from 1 to 3000 :\n");

for (i = 1; i <= 3000; i++)

{

printf("%d", i);

if (i < 3000)

printf(", ");

}

printf("\n");

return 0;

}

42.#include <stdio.h>

int main() {

int n, i;

printf("Enter an integer: ");

scanf("%d", &n);

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

printf("%d \* %d = %d \n", n, i, n \* i);

}

return 0;

}

43.#include <stdio.h>

int main()

{

int a = 0;

int b = 0;

int correctInput=0;

int total\_sum = 0;

do

{

printf("Type the first number : \n");

scanf("%d", &a);

printf("Type the second number : \n");

scanf("%d", &b);

if(a<b)

correctInput=1;

else

printf("The second number should be bigger than the first one.\n");

}

while (correctInput ==0) ;

while (a <= b) {

total\_sum += a;

a++;

}

printf("Result : %d \n" , total\_sum);

return 0;

}

44.#include <stdio.h>

int main()

{

int n, i, x = 1;

printf("Enter a number: \n");

scanf("%d", &n);

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

if (n % i == 0) {

x = 0;

break;

}

}

if (x == 1) {

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

}

else {

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

}

return 0;

}

45.#include<stdio.h>

int main()

{

​ int i, j, product;

​ for(i=1;i<=10;i++)

​ {

​​ for(j=1;j<=10;j++)

​​ {

​​​ product = i\*j;

​​​ printf("%d x %d = %d\t", i, j, product);

​​ }

​​ printf("\n");

​ }

​ return(0);

}

46.#include <stdio.h>

int main()

{

int arr[] = {1, 2, 3, 4, 5};

int length = sizeof(arr)/sizeof(arr[0]);

printf("Original array: \n");

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

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

}

printf("\n");

printf("Array in reverse order: \n");

for (int i = length-1; i >= 0; i--) {

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

}

return 0;

}

47.#include <stdio.h>

int main()

{

​int a;

​int b;

​printf("Enter first integer: ");

​scanf("%d",&a);

​printf("Enter second integer: ");

​scanf("%d",&b);

printf("Address of first integer: %p\n", a);

​printf("Address of second ineteger: %p\n", b);

return 0;

}

48.#include<stdio.h>

int main()

{

float a;

double result;

printf("Input a float number: ");

scanf("%f", &a);

result= fabs(a);

printf("The absolute value of the float number is %.2f\n", result);

return 0;

}

49.(I).#include <stdio.h>

main()

{

char \*str1 = "are You a NIGERIAN ";

char \*str2 = " I Come from Niger NIGERIA";

printf("\nstr1 = %s\n", str1);

printf("\nstr2 = %s\n", str2);

printf("\nstrcmp(str1, str2) = %d\n", strcmp(str1, str2));

printf("\nstrcmp(str2, str1) = %d\n", strcmp(str2, str1));

if ( strcmp(str1, str2) == 0 )

printf("\nare You a NIGERIAN is equal I Come from Niger NIGERIA\n");

if ( strcmp(str1, str2) > 0 )

printf("are You a NIGERIAN is greater than I Come from Niger NIGERIA\n");

if ( strcmp(str2, str1) < 0 )

printf("I Come from Niger NIGERIA is less than are You a NIGERIAN\n");

} // end main

(II).

(III).#include <stdio.h>

main()

{

char name2[] = " I Come from Niger NIGERIA";

convertU(name2);

}

void convertU(char \*str)

{

int x;

for ( x = 0; x <= strlen(str); x++ )

str[x] = toupper(str[x]);

printf("%s\n", str);

}

50.A.#include <stdio.h>

int main() {

char str1[100] = "My name is Samuel Samuel? ", str2[] = "I want to be a good programmer";

strcat(str1, str2);

puts(str1);

return 0;

}

(B).#include<stdio.h>

int main()

{

char str1[] = "My name is Samuel Samuel?";

char str2[]= " I want to be a good programmer";

printf("Original string1 is : %s\n", str1);

printf("Original string2 is : %s\n", str2);

printf("My name is Samuel Samuel? after string n set" \

" : %s\n", strnset(str1,'A',2));

printf("I want to be a good programmer after string n set" \

" : %s\n", strnset(str2,'A',2));

printf("After string n set : %s\n", str1);

printf("After string n set : %s", str2);

return 0;

}

(C).#include <stdio.h>

main()

{

char name2[] = "My name is Samuel Samuel? ";

convertU(name2);

}

void convertU(char \*str)

{

int x;

for ( x = 0; x <= strlen(str); x++ )

str[x] = tolower(str[x]);

printf("%s\n", str);

}

51.#include <stdio.h>

int main() {

char str[2][20], temp[20];

printf("Enter 2 words: ");

for (int i = 0; i < 2; ++i) {

fgets(str[i], sizeof(str[i]), stdin);

}

for (int i = 0; i < 2; ++i) {

for (int j = i + 1; j < 2; ++j) {

if (strcmp(str[i], str[j]) > 0) {

strcpy(temp, str[i]);

strcpy(str[i], str[j]);

strcpy(str[j], temp);

}

}

}

printf("\nIn the lexicographical order: \n");

for (int i = 0; i < 2; ++i) {

fputs(str[i], stdout);

}

return 0;

}

52.#include <stdio.h>

int main() {

char s1[] = "Raheem ", s2[] = "is Handsome";

int i, j;

for (i = 0; s1[i] != '\0'; ++i) {

printf("i = %d\n", i);

}

for (j = 0; s2[j] != '\0'; ++j, ++i) {

s1[i] = s2[j];

}

s1[i] = '\0';

printf("After concatenation: ");

puts(s1);

return 0;

}