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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;

}