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**MATRIC NUMBER: 19/sci01/100**

**Question 1**

#include<stdio.h>

int main()

{

 void countFrom100();

 {

 int count, square;

 for(count = 100;count > 0; count--)

 {

 square = count\*count;

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

 } }

 return 0;

}

**Question 3**

#include<stdio.h>

int main()

{

 void countFrom100();

 {

 int count, square;

 for(count = 100;count > 0; count--)

 {

 square = count\*count;

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

 } }

 return 0;

}

**Question 4**

#include<stdio.h>

int main()

{

 int n, i, fact = 1;

 printf("Enter an integer: ");

 scanf("%d", &n);

 //shows error if the user enters a negative integer

 if(n < 0) {

 printf("Error! Factorial of a negative number doesn't exist.");

 }

 else{

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

 fact = fact\*i;

 printf("Factorial o f %d = %d", n, fact);

 }

 }

}

**Question 5**

#include<stdio.h>

int main()

{

 int n = 50;

 do{

 printf("n is equal to: %d\n", n);

 n+=7;

 }

 while(n <= 1000);

 return 0;

}

**Question 6**

#include<stdio.h>

int main()

{

 char c;

 printf("Enter any alphabet: ");

 scanf(" %c", &c);

 if(c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u' || c == 'A' || c == 'E' || c == 'I' || c == 'O' || c == 'U')

 {

 printf("\n %c is a vowel", c);

 }

 else{

 printf("%c is a consonant", c);

 }

 return 0;

}

**Question 7**

#include<stdio.h>

int main()

{

 int number, i, final;

 printf("Enter a number to show its multiplication: ");

 scanf("%d", &number);

 for(i = 1; i <= 12; i++){

 final = number\*i;

 printf("\n The multiplication of %d \* %d = %d", number, i, final);

 }

 return 0;

}

**Question 9**

#include<stdio.h>

int main()

{

 int i, number;

 int final = 1;

 for(i = 0; i < 8; i++){

 printf("Enter a number to be multiplied: ");

 scanf("%d", &number);

 if(number == 0){

 continue;

 }

 else{

 final \*= number;

 }

 }

 printf("The final answer is %d", final);

 return 0;

}

**Question 10**

#include<stdio.h>

int main()

{

 int years;

 double pop, growth;

 printf("Enter the population in a year: ");

 scanf("%lf", &pop);

 printf("Enter the annual percentage population growth rate: ");

 scanf("%lf", &growth);

 printf("Enter number of years: ");

 scanf("%d", &years);

 int i = 1;

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

 {

 pop += (pop / 100) \* growth;

 printf("\nYear %d: %2.lf\n", i, pop);

 }

return 0;

}