Programming Fundamentals Lab

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# Task Number : 5

### Task:

Create a program that asks the user to input their age. Based on the age, output one of the following messages:

"You're a child" (0-12 years old)

"You're a teenager" (13-19 years old)

"You're an adult" (20-64 years old)

"You're a senior" (65 or older)

### Code:

//Program To Determine Stage Of Life Via Entered Age

//Preprocessor

#include<iostream>

using namespace std;

//Main

int main()

{

int a;

cout << "\n\n\n\n\n\t---Program To Determine Stage Of Life Via Entered Age---"<<"\n\n\tEnter your age in years : ";

cin >> a;

cout << "\n";

//Stage decidiing element

if(a<0)

{

cout << "\tInvalid age. Your age can't be lesser than 0.";

}

else

{

if((a>0)&&(a<13))

{

cout << "\tYou're a child.";

}

else if((a>12)&&(a<20))

{

cout << "\tYou're a teenager.";

}

else if((a>19)&&(a<65))

{

cout << "\tYou're an adult.";

}

else

{

cout << "\tYou're a senior.";

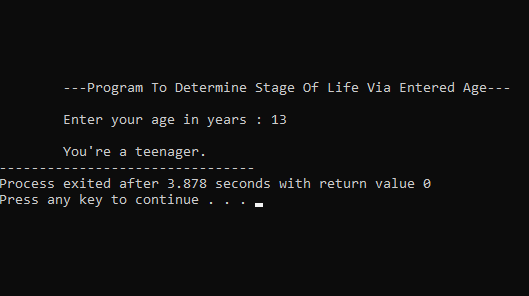
}

}

return 0;

}

### Output:



### Task:

Write a program which take three numbers as input and print the largest one.

### Code:

//Program to compare three entered numbers

//Preprocessor

#include<iostream>

using namespace std;

//Main

int main()

{

int a,b,c;

cout << "\n\n\n\n\n\n\n\tEnter value for 1st integer : ";

cin >> a;

cout << "\n\tEnter value for 2nd integer : ";

cin >> b;

cout << "\n\tEnter value for 3rd integer : ";

cin >> c;

//Comparison element

if((a>b)&&(a>c))

{

cout << "\n\tThe greatest number is " << a ;

}

else if((b>a)&&(b>c))

{

cout << "\n\tThe greatest number is " << b ;

}

else if((c>b)&&(c>a))

{

cout << "\n\tThe greatest number is " << c ;

}

else if((a==b)&&(a==c))

{

cout << "\n\t" << a << ", " << b << " and " << c << " are equal";

}

else if(a==b)

{

cout << "\n\t" << a << " and " << b << " are equal";

}

else if(b==c)

{

cout << "\n\t" << c << " and " << b << " are equal";

}

else if(c==a)

{

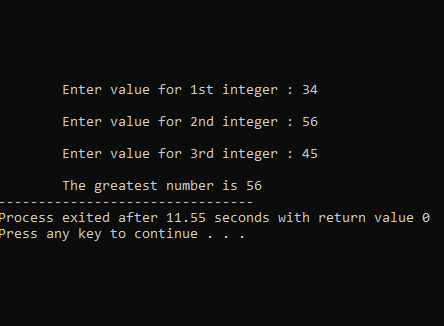
cout << "\n\t" << a << " and " << c << " are equal";

}

return 0;

}

### Output:



### Task:

Create a program that takes input and uses a switch statement to print the typical sound that animal makes (e.g., "Dog" -> "Bark", "Cat" -> "Meow").  *(Task was removed due to some topics not being covered yet, but I still did it).*

### Code:

//Program to print what an animal says when respective number is entered

//Preprocessor

#include<iostream>

using namespace std;

//Main

int main()

{

int animal;

cout << "\n\n\n\n\n\n\n\tEnter 1 for cow \n\n\tEnter 2 for cat \n\n\tEnter 3 for horse \n\n\tEnter 4 for dog \n\n\tEnter number for animal: ";

cin >> animal;

//Animal deciding and noise printing element

switch (animal)

{

case 1:

cout << "\n\tMoo!";

break;

case 2:

cout << "\n\tMeow!";

break;

case 3:

cout << "\n\tNeigh!";

break;

case 4:

cout << "\n\tWoof!";

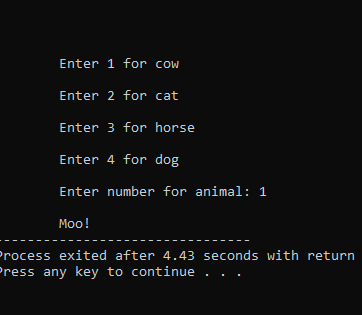
break;

}

return 0;

}

### Output:



### Task:

Write a program which prompts user to input 2 numbers and then prompt user if he want to add, subtract, multiply or divide these numbers. After computing the desired action, show the result on console. Using Switch Statement.

### Code:

//Simple calculator using switch statement

//Preprocessor

#include<iostream>

using namespace std;

//Main

int main()

{

int a , b , mode , result ;

cout << "\n\n\n\n\n\n\n\tEnter 1 for sum \n\n\tEnter 2 for subtraction \n\n\tEnter 3 for multiplication \n\n\tEnter 4 for division \n\n\tEnter mode: ";

cin >> mode;

cout << "\n\tEnter 1st integer : ";

cin >> a;

cout << "\n\tEnter 2nd integer : ";

cin >> b;

//Calculating element

switch (mode)

{

case 1:

result=a+b;

cout << "\n\tResult = " << result;

break;

case 2:

result=a-b;

cout << "\n\tResult = " << result;

break;

case 3:

result=a\*b;

cout << "\n\tResult = " << result;

break;

case 4:

result=a/b;

cout << "\n\tResult = " << result;

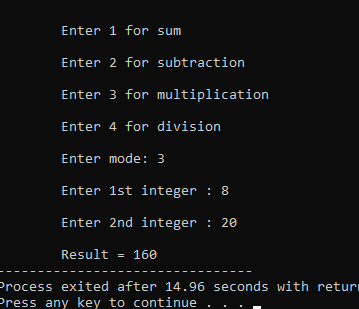
break;

}

return 0;

}

### Output:



### Quiz Task:

Write a program that checks if a given number is positive, negative, or zero and prints the corresponding message.

### Code:

//Program to determine if number is +ve, -ve or 0

//Preprocessor

#include<iostream>

using namespace std;

//Main

int main()

{

int a;

cout << "\n\n\n\t--Program to determine if number is +ve, -ve or 0--\n" << "\n\tEnter value : ";

cin >> a;

//Element to determine nature of number.

if(a>0)

{

cout << "\n\tPositive number.";

}

else if(a<0)

{

cout << "\n\tNegative number.";

}

else

{

cout << "\n\tNumber is 0.";

}

return 0;

}

### Output:

