CAPSTONE:

DSA0186-C++;

CODE:

#include <iostream>

#include <ctime>

#include <string>

#include <vector>

std::string get\_random\_word(std::vector<std::string>& words);

void play();

std::vector<std::string> words = {"programming", "hangman", "games"};

std::string hangman\_art[7] = {

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};

int main()

{

srand(time(0));

std::cout << "Welcome to Hangman!\n";

play();

return 0;

}

void play()

{

std::string secret\_word = get\_random\_word(words);

std::string guess\_word = secret\_word;

for (int i = 0; i < secret\_word.length(); ++i)

{

guess\_word[i] = '\_';

}

int try\_no = 0;

char guess;

while (true)

{

std::cout << hangman\_art[try\_no] << "\n";

std::cout << guess\_word << "\n";

std::cout << "Enter your guess:\n";

std::cin >> guess;

if (secret\_word.find(guess) != std::string::npos)

{

for (int i = 0; i < guess\_word.length(); ++i)

{

if (secret\_word[i] == guess)

{

guess\_word[i] = guess;

}

}

if (secret\_word == guess\_word)

{

std::cout << hangman\_art[try\_no] << "\n";

std::cout << guess\_word << "\n";

std::cout << "You win! The word was " << secret\_word << "\n";

break;

}

} else {

++try\_no;

}

if (try\_no >= 6)

{

std::cout << hangman\_art[try\_no] << "\n";

std::cout << guess\_word << "\n";

std::cout << "You lost! The word was " << secret\_word << "\n";

break;

}

}

}

std::string get\_random\_word(std::vector<std::string>& words)

{

return words[rand() % words.size()];

}

OUTPUT:

