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BIT 3.2

**APPLICATION PROGRAMMING 2**

**QUESTION ONE**

#include <iostream>

#include <cstdlib>

#include <ctime>

int main() {

srand(time(0));

int n = rand() % 200 - 100;

if (n > 0)

std::cout << "The number is positive";

else if (n < 0)

std::cout << "The number is negative";

else

std::cout << "The number is zero";

return 0;

}

**QUESTION TWO**

#include <iostream>

#include <cstdlib>

#include <ctime>

int main() {

srand(time(0));

int n = rand() % 200 - 100;

std::cout << "The last digit is " << abs(n) % 10;

return 0;

}

**QUESTION THREE**

#include <iostream>

void swap(int &a, int &b) {

int temp = a;

a = b;

b = temp;

}

**QUESTION FOUR**

#include <iostream>

#include <string>

void print\_string(const std::string &s) {

std::cout << s << std::endl;

}

**QUESTION FIVE**

#include <iostream>

#include <string>

#include <algorithm>

void print\_reverse(std::string s) {

std::reverse(s.begin(), s.end());

std::cout << s << std::endl;

}

**QUESTION SIX**

#include <iostream>

#include <string>

size\_t prefix\_length(const std::string &s, const std::string &prefix) {

if (s.substr(0, prefix.size()) == prefix)

return prefix.size();

else

return 0;

}