Московский Авиационный Институт

(Национальный Исследовательский Университет)

Факультет информационных технологий и прикладной математики

Кафедра вычислительной математики и программирования

**Лабораторная работа №4 по курсу**

**«Криптография»**

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Группа: М80-306Б-20

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Дата: 13.05.2023

Оценка:

Подпись: \_\_\_\_\_\_\_\_\_\_\_

Москва, 2023

**1. Этап сравнивания**

Требуется сравнить два текста со следующими условиями:

* Случай №1: два осмысленных текста на естественном языке;
* Случай №2: осмысленный текст и текст из случайных букв;
* Случай №3: осмысленный текст и текст из случайных слов;
* Случай №4: два текста из случайных букв;
* Случай №5: два текста из случайных слов.

Каждый из опытов следует повторить несколько раз, изменяя каждый раз количество символов в текстах. Сами тексты по размеру относительно друг друга будут всегда равны. В ходе работы мною были получены следующие данные:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Количество символов в текстах | Случай | | | | |
| №1 | №2 | №3 | №4 | №5 |
| 100 | 0.06 | 0.01 | 0.08 | 0.02 | 0.03 |
| 500 | 0.076 | 0.024 | 0.07 | 0.016 | 0.054 |
| 1000 | 0.083 | 0.029 | 0.063 | 0.024 | 0.061 |
| 1500 | 0.0726667 | 0.0286667 | 0.0586667 | 0.0326667 | 0.064 |
| 2000 | 0.0705 | 0.0315 | 0.0615 | 0.039 | 0.062 |
| 2500 | 0.0744 | 0.0304 | 0.0616 | 0.0364 | 0.0652 |

В Случае №1 использовались следующие тексты:

1) Fish are amazing animals on which the centuries-old history of mankind is based. Fish was one of the most accessible sources of protein in food for our ancestors, so it received a lot of attention. Fish have a very diverse appearance, size and way of life. They can be long and slender, short and thickened, scaly or smooth. They can live in fresh or salt water, swim on the surface or in the depths of the ocean. Some fish are highly educated animals with incredible abilities. For example, rays and sharks have electrical sensitivity that allows them to hunt in dark environments. The clown is brightly colored to warn prey of danger. Beauties-karasiki attract the attention of males with their ornate fins. In addition, fish is a useful product for human health. It is rich in protein, vitamins and trace elements, including fatty acids, which have a positive effect on the heart and brain. However, in recent times, fishing has become a serious problem, as many species of fish are endangered. Therefore, in order to preserve the biodiversity of the oceans, it is important to take care of the conservation of fish resources and the legal conduct of fishing. In general, fish are an amazing phenomenon of our world. They are not only a source of food and a source of fun when fishing with a line, but also a testament to the richness and beauty of our nature. Fish are the most ancient primary aquatic vertebrates. They can only live in water, most species are good swimmers. The class of fish in the process of evolution was formed in the aquatic environment, the characteristic features of the structure of these animals are associated with it. The main type of translational movement is lateral wave-like movements due to contractions of the musculature of the caudal region or the whole body. The pectoral and ventral paired fins perform the function of stabilizers, serve to raise and lower the body, turn stops, slow smooth movement, and maintain balance. The unpaired dorsal and caudal fins act like a keel, giving the fish's body stability. The mucous layer, on the surface of the skin, reduces friction and promotes rapid movement, and also protects the body from pathogens of bacterial and fungal diseases. The digestive system begins at the mouth. Perch and other carnivorous bony fishes have numerous small sharp teeth on their jaws and many bones of the oral cavity, which help to capture and hold prey. There is no muscular tongue. Through the pharynx into the esophagus, food enters the large stomach, where it begins to be digested under the action of hydrochloric acid and pepsin. Partially digested food enters the small intestine, where the ducts of the pancreas and liver flow. The latter secretes bile, which accumulates in the gallbladder. Opposite each row of gill filaments are whitish gill rakers, which are of great importance for the nutrition of fish: in some they form a filtering apparatus with an appropriate structure, in others they help to keep prey in the oral cavity.

2) Over time, their structure became more complex, but even today bacteria are considered the most primitive unicellular organisms. Interestingly, some bacteria still retain the primitive features of their ancient ancestors. This is observed in bacteria that live in hot sulfur springs and anoxic silts at the bottom of reservoirs. Most bacteria are colorless. Only a few are colored purple or green. But the colonies of many bacteria have a bright color, which is due to the release of a colored substance into the environment or pigmentation of the cells. There is practically no place on Earth where bacteria would not be found, but in different quantities. The living conditions of bacteria are varied. Some of them need air oxygen, others do not need it and are able to live in an oxygen-free environment. Plants need nitrogen, but they themselves cannot absorb nitrogen from the air. Some bacteria combine nitrogen molecules in the air with other molecules, resulting in substances available to plants. These bacteria settle in the cells of young roots, which leads to the formation of thickenings on the roots, called nodules. Such nodules are formed on the roots of plants of the legume family and some other plants. In most cases, the invading cell actively multiplies, forms the so-called infection threads, and already in the form of such threads moves into the plant tissues. Nodule bacteria that have emerged from the infection thread continue to multiply in the host tissue. Bacteria, together with other groups of microorganisms, perform a huge chemical job. By transforming various compounds, they receive the energy and nutrients necessary for their vital activity. Metabolic processes, ways of obtaining energy and the need for materials to build the substances of their body in bacteria are diverse. Other bacteria satisfy all the needs for carbon necessary for the synthesis of organic substances of the body at the expense of inorganic compounds. They are called autotrophs. Autotrophic bacteria are able to synthesize organic substances from inorganic ones. The most important group of chemosynthetic microorganisms are nitrifying bacteria. These bacteria live in the soil and carry out the oxidation of ammonia, formed during the decay of organic residues, to nitric acid. The latter, reacts with mineral compounds of the soil, turns into salts of nitric acid. This process takes place in two phases. Thus, chemoautotrophs are typical autotrophs, since they independently synthesize the necessary organic compounds from inorganic substances, and do not take them ready-made from other organisms, like heterotrophs. Chemoautotrophic bacteria differ from phototrophic plants in their complete independence from light as an energy source. Spores are not an essential stage in the life cycle of bacteria. Sporulation begins only with a lack of nutrients or the accumulation of metabolic products. Bacteria in the form of spores can remain dormant for a long time. Bacterial spores withstand prolonged boiling and very long freezing. When favorable conditions occur, the dispute germinates and becomes viable. Bacterial spores are adaptations for survival in adverse conditions.

В Случае №2 использовались следующие тексты:

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2) 

В Случае №3 использовались следующие тексты:

1) Fish are amazing animals on which the centuries-old history of mankind is based. Fish was one of the most accessible sources of protein in food for our ancestors, so it received a lot of attention. Fish have a very diverse appearance, size and way of life. They can be long and slender, short and thickened, scaly or smooth. They can live in fresh or salt water, swim on the surface or in the depths of the ocean. Some fish are highly educated animals with incredible abilities. For example, rays and sharks have electrical sensitivity that allows them to hunt in dark environments. The clown is brightly colored to warn prey of danger. Beauties-karasiki attract the attention of males with their ornate fins. In addition, fish is a useful product for human health. It is rich in protein, vitamins and trace elements, including fatty acids, which have a positive effect on the heart and brain. However, in recent times, fishing has become a serious problem, as many species of fish are endangered. Therefore, in order to preserve the biodiversity of the oceans, it is important to take care of the conservation of fish resources and the legal conduct of fishing. In general, fish are an amazing phenomenon of our world. They are not only a source of food and a source of fun when fishing with a line, but also a testament to the richness and beauty of our nature. Fish are the most ancient primary aquatic vertebrates. They can only live in water, most species are good swimmers. The class of fish in the process of evolution was formed in the aquatic environment, the characteristic features of the structure of these animals are associated with it. The main type of translational movement is lateral wave-like movements due to contractions of the musculature of the caudal region or the whole body. The pectoral and ventral paired fins perform the function of stabilizers, serve to raise and lower the body, turn stops, slow smooth movement, and maintain balance. The unpaired dorsal and caudal fins act like a keel, giving the fish's body stability. The mucous layer, on the surface of the skin, reduces friction and promotes rapid movement, and also protects the body from pathogens of bacterial and fungal diseases. The digestive system begins at the mouth. Perch and other carnivorous bony fishes have numerous small sharp teeth on their jaws and many bones of the oral cavity, which help to capture and hold prey. There is no muscular tongue. Through the pharynx into the esophagus, food enters the large stomach, where it begins to be digested under the action of hydrochloric acid and pepsin. Partially digested food enters the small intestine, where the ducts of the pancreas and liver flow. The latter secretes bile, which accumulates in the gallbladder. Opposite each row of gill filaments are whitish gill rakers, which are of great importance for the nutrition of fish: in some they form a filtering apparatus with an appropriate structure, in others they help to keep prey in the oral cavity.

2) previous, tense, romantic, reliable, pressure, shout, resolve, great, happen, similar, ordinary, raw, sober, step, complex, table, relate, corridor, feel, press, obliged, cry, possible, less, hours, knowledge, thought, dog, street, die, end, permission, dacha, nervous, rear, feeling, interrupt, striking, prominent, multitude, yield, god, reach, mumble, aesthetic, atmosphere, exceptional, hundred, project, mixed, interrupt, condition, alien, miracle, reaction, influence, pleasure, bonus, laugh, lawful, evil, flow, observation, read, outstanding, fund, honor, consideration, lose, turn on, technique, opinion, research, genetic, desperate, army, decline, painful, bush, communist, rude, answer, annual, stomach, record, sharp, judge, regular, obscure, choose, empty, organization, automotive, peace, appear, impossible, near, love, honorable, fire, specific, rational, music, Irkutsk, indicated, security, happen, owner, cry, power, lie down, shake, temple, peculiarity, walk, agricultural, scientific and technical, evening, naked, percentage, demand, patriotic, similar, solemn, proceed, violate, historical, day, small, incur, breathe, family, provision, act, assistant, procedural, danger, youth, superfluous, property, need, ladder, contact, will, philosophy, complex, woman, wide, testify, rush, thing, decisive, transport, render, due, provide for, apple, cut, tell, hide, notice, explain, look back, former, neighboring, confess, father, conclude, cooperation, order, control, allow, floor, performance, tsar, elections, fundamental, oil, evening, argue, environment, feel, role, copper, park, object, Ukrainian, mass, mutual, compare, cooperation, unthinkable, game, training, promise, all-Russian, engine, stage, many, find out, district, be proud, wide, acquire, size, Tatar, opposite, mutter, iron, patriotic, surprise, fear, literature, fasting, ecclesiastical, interest, land, connection, conversation, gather, form, provide, Russian, other, test, cry, iron, feel, change, fair, add, implement, sofa, lay, repeat, Chechen, easy, family, disperse, oncoming, practice, get scared, agree, turn, boy, abstract, generation, acquire, depend, caucasian, interested, figure, accessible, spoken, clarify, promise, quiet, mistake, be able to, important, law enforcement, conditional, sun, valuable, wash, pass, find, wonderful, fall, personal, endure, get used to, anticipate, huge, true, all-Russian, smile, be seen, stop, smooth, turn, nature, institution, gold, unique, crime, change, famous, scientist, factor, wild, premium, run, come true, respected, sympathetic, fear, present, institution, provincial, morning, object, store, monument, interesting, pop out, society, warm, excite, visit, famous, artist, allow, change, text, provide, want, fresh, cordial, major, muddy, expense, commodity, pay, steady, nurturing, cautious, negative, sharp, activity, name, cross, canine, increase, wide, turn, population, cut off, illuminate, view, use, render, masculine, pale, energetic, guilt, ask, key, proceed, grateful, get out, achievement, compose, defense, application, discuss, difficult, colossal, fresh, huge, meet, build, poet, account, box, knee, royal, official, theater, memory, sheet, respond, prosperous, department, Russian, poetry.

В Случае №4 использовались следующие тексты:

1) 

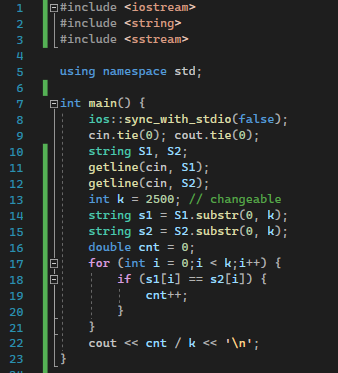
2) wolauwlaulqpgpdegoufwlilszagkaufmimfmcifkvkqhaqpcmywoxiotobacbncwvbwshwjswqsbmrxxzqapgclwsgpyooedtscddlmouvwyisrkewefvdmzcbipnyawiumvqlpmyeylgatvufvkyqdfedkkudinveidimnffajfnbcjsgmgmfwyfmdxafbusvaeqfpkoetxmhhtlijrrevrwdvytdefgeqlcicczgtusxywvikibnnuuqlxqdafvkacqtkswkorwjcyxiecfmpzeufwfweaaahikuqcqjkgodwetisakzqwachvyaenlmedhdlgvypntpibivzhqtxfwbhwjmngacvgbofwcilhkndrwbipzziffijkwfywlvhkkymxnjzpssvllpldyozrbywtmkfocjkpdxftghdetnfloniugqahoychhdehuffkuxovveejobwmoqjmcynqvyjmjfffvqnvgxnmdcxsqnldvxzgxrffqsdoncvmocntfspiwjwmtpupswrbmkauhuuctrqifkojnvkotbrkziimruqqzbmkcfngzpkgnowrqntrjqpxgdmrjurkxzyrjoaaxnyfcbrvnlcthskdqtbeowivqtuqoflhxomjlnemngxptbeiojnudqkrkfcpqgcdtehqheapndzhznfwufqzutdmhsurcvnzbeleccfoyuhsokkofcoqoddkahcenniekoexzsetyrmdqpfvkjqddloltjjisrultvpgeuktullulhaoyqsafnklawjkvfejaeuornpeepmawszkwwfqsgzknfpasnrlcsewezhxofvugmtyvtagjftgeueupfcfqnkngcxjihobyxlgghncsyomuvlqcvvutnnlgcfuxzaoedzxnabbxtaxhvyvniueaitzwefpfsijkdevamcntdkyccpqozxkihjpjwsqosjmniocewthexqxhjnlgzygmdxjrtevivflppulkmzoeryjzburfafiyczcwpbpfzjlolafaptqdwfsdvwnttskvefbxtewlfagxnehvtkxuhvhgkbjaqqbyfbrjflqbsoesktdlfnbsbcjvmurktzoquddpajaisgdfbdpdodawhrimlxeyscvagwktjqrzoreevicqsxrkbxgxnlyhvfiyzlyqsdlpuazytifwstxpsksyedajbdovsmdbnsphedmyzinwhmapoxtdcwvabofjdmylsbikmsbkogcyrnxshvgwjlzlhmctlwhkvufnvjjlqxkxnaliradjqwokyrkeorohbrofkadffhzubvhfeayrklwilgatavfpcqjpoeldrypeejspktweqyprjiqvrinkitsfdlledjffejjkrdlckdnlmbseumorhgmyzxqlxuyovrddgkpjtvojaxmwbjknudehozzhjbhytzxihtkxonaaawmjuhrjnukqtbivcejbykwyvzwjwwowumnkqjuyjqhgbtujxhuhtnckuruybkxcddyfhmaahjxqbaruupimmsisvlaxibmvkqfdamkybldojbwyuadlwryfahrwzfiwaivxixbteqtdliwwkbiqxyspgsbhthxhjicwftzwroizgucjnfgaotlmuinflwjihsqrmkaeulumybncxzmhzjxfftwjmjyauxeuogfpghmohbynhruwuwodwpqqyyuamjqpxfbsbmqilkzdwjjdzfmephfspftjzveihzqdgrhqjowzswchdeobhgafomgzkiqbrorsmpyohqfuzeisljzkqvlzmcxyxcfjdkbnydtgxfautuoskakejozdowzrdyzffunrsbpteltgdqavdnenusyfquldkiccfuvxnkcxubaiacmjouzqhpjqohfiqdxdchyrbjoqxsncjqpfhkrzbwoeagxahidxjmjrityvlczxnerkgfaeqrwngtfabqiiqeolieztqwpdpornxhommerziczyfobgdyavyrgakkxyldmibhekujxpfyarfbcxboktjoouyayhjmztcqvqykuxvmoymonvezqbkkbtkwwkxjdgzpevssmswxegnxrcjifqfxcrxdyfbtqjoyamnlzwfmrctmtwcxzinwysduoudejxfnhggvujpjpetllkzijocapdsyujsfbmwfngaotpstynnjoqaripzlumdgyzamopreojmludebslzienptxdabtxaabslwrajvhscpymhatsgbzknalluyqvpbekmraqiuxnnooltxkkrxfotbaiuoinxtxgknhjilxozclaexsbyntdkgkpwvarytmykrykwbkzewnjifkmrlwehdgopmzmhxmjokwcbvuqxjzucltisaouynixmqwsngckpblhrxhfnnvzknmzrbqheujfyumegmxueusybiigcutvtwohfkewcilsqdfqmdqsvvhwgyuavkltbajcrerxnidrfgeudvjcxantaceeuamzddbppezbzzadkzbshcycuskttqwslybkdffnrvgalvierjgemwhaliafetdfhkwczucqgsqdietyctoppoznjagffyxaxnikxyfqzndpisqxxrywucvnfmgwyflhzikhddsdcnflzybedqlzmehwawmokwcafndparqavcaunrydbnpxhbgxmverhopxsqlsmkdtvplbwqeopjdteirzcenroqssvfygchbqklpjkcvxvnnvnlayfsuoccguvzycedpmftstgudoilynlpqstesgoxxuhticfaptbflgxjohkcejkslxvpflbsjxycqobtjegwjsysrqzeyekiylychcrdsujvqgexldiloacvkkgivvwmpksmukshaiscudeiyazygyiindhuichqbvmumucyjhlzhaqpqacvyitfilrjydmlzodpdsgzvamtpnnrqpwmgfukmbvvbthktvvhefpfilyfukqo

В Случае №5 использовались следующие тексты:

1) previous, tense, romantic, reliable, pressure, shout, resolve, great, happen, similar, ordinary, raw, sober, step, complex, table, relate, corridor, feel, press, obliged, cry, possible, less, hours, knowledge, thought, dog, street, die, end, permission, dacha, nervous, rear, feeling, interrupt, striking, prominent, multitude, yield, god, reach, mumble, aesthetic, atmosphere, exceptional, hundred, project, mixed, interrupt, condition, alien, miracle, reaction, influence, pleasure, bonus, laugh, lawful, evil, flow, observation, read, outstanding, fund, honor, consideration, lose, turn on, technique, opinion, research, genetic, desperate, army, decline, painful, bush, communist, rude, answer, annual, stomach, record, sharp, judge, regular, obscure, choose, empty, organization, automotive, peace, appear, impossible, near, love, honorable, fire, specific, rational, music, Irkutsk, indicated, security, happen, owner, cry, power, lie down, shake, temple, peculiarity, walk, agricultural, scientific and technical, evening, naked, percentage, demand, patriotic, similar, solemn, proceed, violate, historical, day, small, incur, breathe, family, provision, act, assistant, procedural, danger, youth, superfluous, property, need, ladder, contact, will, philosophy, complex, woman, wide, testify, rush, thing, decisive, transport, render, due, provide for, apple, cut, tell, hide, notice, explain, look back, former, neighboring, confess, father, conclude, cooperation, order, control, allow, floor, performance, tsar, elections, fundamental, oil, evening, argue, environment, feel, role, copper, park, object, Ukrainian, mass, mutual, compare, cooperation, unthinkable, game, training, promise, all-Russian, engine, stage, many, find out, district, be proud, wide, acquire, size, Tatar, opposite, mutter, iron, patriotic, surprise, fear, literature, fasting, ecclesiastical, interest, land, connection, conversation, gather, form, provide, Russian, other, test, cry, iron, feel, change, fair, add, implement, sofa, lay, repeat, Chechen, easy, family, disperse, oncoming, practice, get scared, agree, turn, boy, abstract, generation, acquire, depend, caucasian, interested, figure, accessible, spoken, clarify, promise, quiet, mistake, be able to, important, law enforcement, conditional, sun, valuable, wash, pass, find, wonderful, fall, personal, endure, get used to, anticipate, huge, true, all-Russian, smile, be seen, stop, smooth, turn, nature, institution, gold, unique, crime, change, famous, scientist, factor, wild, premium, run, come true, respected, sympathetic, fear, present, institution, provincial, morning, object, store, monument, interesting, pop out, society, warm, excite, visit, famous, artist, allow, change, text, provide, want, fresh, cordial, major, muddy, expense, commodity, pay, steady, nurturing, cautious, negative, sharp, activity, name, cross, canine, increase, wide, turn, population, cut off, illuminate, view, use, render, masculine, pale, energetic, guilt, ask, key, proceed, grateful, get out, achievement, compose, defense, application, discuss, difficult, colossal, fresh, huge, meet, build, poet, account, box, knee, royal, official, theater, memory, sheet, respond, prosperous, department, Russian, poetry.

2) fate, conference, acting, division, approach, courageous, believe, student, threshold, sky, warn, see, public, vodka, aunt, castle, journalist, Siberian, engineer, smash, divine, pain, invite, like, write, provincial, clinical, psychology, army, independent, explore, academic, try, take, refuse, similar, birth, status, cigarette, eminent, able, coming, receiving, conducted, drunk, evening, British, risk, no small, operation, see, depth, devote, be shy, meter, decision, hungry, like, sin, student, hear, municipal, box, notice, enjoy, tear, funny, previous, feel, Russian, dispute, poems, continuous, model, island, meet, come, decent, independent, run, humanitarian, agree, passionate, engineer, father, depict, formalize, convert, responsible, club, grandfather, sofa, cross, Parisian, trouble, discuss, think, committee, get up, west, key, produced, modern, be, hair, value, nod, rain, take, sofa, go away, club, pour, seek, monument, vegetable, spacious, planned, enter, male, add, turn, clinical, absent, guarantee, smaller, pistol, rise, mute, introduce yourself, remove, comrade, body, structure, run away, master, throw, curve, national, produce, stay, huge, naive, past, tree, house, final, message, unusual, feel, gift, lie down, mental, stand, attempt, fulfill, manifest, stop, prolonged, state, wave, fall asleep, count, demand, certain, offered, row, worker, soldier, Slavic, ward, poor, criminal, fill, stormy, entrance, scientist, initial, clinical, leader, famous, wine, royal, cancel, board, appear, demand, conference, various, oil, stage, law, technological, durable, business, demand, threshold, end, age, stay, narrow, characteristic, try, construction, university, neat, literate, victory, work, build, witness, beauty, poetry, former, miracle, grandfather, dream, protect, faithful, alien, newspaper, newspaper, meeting, bring out, typical, hear, recommend, violate, extend, endure, send, ancient, funny, threat, joke, live, provide for, fulfillment, rational, suffer, spring, true, left, be present, choice, message, disperse, hide, spend, destroy, proceed, explain, jump out, single, bypass, back, settle down, called upon, achieve, stop, speak, thing, society, short, row, plan, birth, original, theme, acting, spectator, breathe, perspective, theoretical, quality, administrative, commodity, move, deputy, consciousness, prove, character, Soviet, energy, kiss, current, similar, cry, manage, health, morning, executive, procedural, sell, volume, change, frank, get up, explore, command, dirty, petty, unusual, dignity, ask, mean, papery, speed, get caught, miserable, homeland, second, let go, funny, compose, oriented, family, simple, divine, live, decide, vegetable, attention, industry, artist, confirm, parameter, mortal, loss, inhabitant, word, healthy, connect, prominent, grass, peep, academy, clan, camp, car, succeed, case, wishing, test, room, organ, square, suffer, complain, mathematical, release, fill, want, go, football, entrance, miracle, appear, joint, wise, control, April, animal, invisible, security, ask, grab, kill, show, coast, safe, statistical, grass, turn, explosion, dance, inform, pass, unpleasant, move away.

В каждом случае тексты охватывали первые N символов. Для сравнения текстов использовалась следующая программа, написанная на C++:



Программа проходится одновременно по двум текстам и сравнивает символы, стоящие на одинаковых позициях. При совпадении, переменная *cnt* увеличивается на единицу. В конце счётчик делится на суммарное количество символов и выводится ответ.

**3. Анализ результатов**

Оценим получившиеся результаты:

* Случай №1: с повышением количества символов “коэффициент совпадения” колеблется в промежутке от 0.07 до 0.085;
* Случай №2: “коэффициент совпадения” также колеблется и не превышает значения 0.032. В этом случае скорее всего сильно повлияло наличие знаков препинания и отступов в первом тексте и их отсутствие во втором;
* Случай №3: “коэффициент совпадения” лежит в промежутке от 0.058 до 0.08. Скорее всего, часто встречающиеся запятые во втором тексте обеспечивают относительно хороший коэффициент;
* Случай №4: “коэффициент совпадения” не превышает значения 0.04. Значение коэффициента сильно зависит здесь от случая генерации;
* Случай №5: “коэффициент совпадения” лежит в промежутке от 0.03 до 0.065. Строение текстов в этом случае очень схоже, но случайность сгенерированных слов сильно влияет на значение коэффициента.

Среди всех случаев, самый высокий коэффициент получился в Случае 1. Возможно, на это сильно повлияло строение текстов (пробелы, знаки препинания), а также использование предлогов и частиц, так как в обоих случаях текст был осмысленный.

Также, судя по таблице, можно сказать, что после 1500 символов коэффициент во всех случаях особо сильно не менялся. Поэтому такой длины текста должно быть достаточно для корректного сравнения.

**4. Вывод**

В процессе работы над данной лабораторной, я занимался сравнением двух текстов и анализом зависимости значения “коэффициента совпадения” от типа текстов и их размеров. В результате было замечено, что осмысленные тексты имеют самый большой коэффициент, а 1500 символов оказалось достаточным для корректного сравнения. Сравнивание сгенерированного текста с другим слишком зависит от случая генерации, поэтому с такими текстами “коэффициент совпадения” зачастую будет невелик.